U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

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Water Resources Data for Oregon
Water Year 1973. Part 1
Surface Water Records

(U.S.) Geological Survey, Portland, OR Water Resources Div

1974

PB 289312

1973

Water Resources Data for Oregon

Water Year 1973

Part 1. Surface Water Records

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MARCH 3, 1849

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OR-73-1

Prepared in cooperation with the State Engineer of Oregon
and with other agencies

CALENDAR FOR WATER YEAR 1973

1972

OCTOBER

S	M	T	W	T	F	S
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1973

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15. Supplementary Notes

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16. Abstracts

Water resources data for the 1973 water year for Oregon consist of stage, discharge of streams, lakes, and reservoirs. This report contains discharge records for 303 gaging stations; stage only records for 6 gaging stations; stage and contents for 38 lakes and reservoirs. Also included are 12 low-flow and 175 crest-stage partial-record stations. Additional water data were collected at various sites not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Oregon.

17. Key Words and Document Analysis. 17a. Descriptors

*Oregon, *Hydrologic data, *Surface water, Flow rate, Gaging Stations, Lakes, Reservoirs.

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

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1973

Water Resources Data
for
Oregon
Water Year 1973

Part 1. Surface Water Records

MARCH 3, 1849

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OR-73-1

Prepared in cooperation with the State Engineer of Oregon
and with other agencies

Prepared in cooperation with

State Engineer of Oregon
Oregon State Board of Higher Education
Oregon State Game Commission
Oregon State Highway Commission
Burnt River Irrigation District
County of Coos, Board of Commissioners
County of Douglas, County Court
County of Lane, Board of Commissioners
City of Astoria
City of Coos Bay-North Bend, Water Board
City of Eugene, Water and Electric Board
City of Lakeside, Water Department
City of McMinnville, Water and Light Department
City of Portland, Bureau of Water Works
City of The Dalles
City of Toledo
Forest Service, U.S. Department of Agriculture
Corps of Engineers, U.S. Army
Bonneville Power Administration, U.S. Department of the Interior
Bureau of Land Management, U.S. Department of the Interior
Bureau of Reclamation, U.S. Department of the Interior
Fish and Wildlife Service, U.S. Department of the Interior
Environmental Protection Agency, U.S. Department of the Interior
National Weather Service, U.S. Department of Commerce

Water resources records, 1973, for Oregon are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Oregon
   Part 1: Surface Water Records

2. Water Resources Data for Oregon
   Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
P.O. Box 3202
Portland, Oregon 97208

1974

CONTENTS

Page
List of gaging stations, in downstream order, for which records are published ... IV
Introduction ... 1
Cooperation ... 1
Definition of terms ... 2
Special networks and programs ... 3
Downstream order and station numbers ... 3
Explanation of surface-water data ... 4
  Collection and computation of data ... 4
  Accuracy of data ... 8
  Publications ... 9
  Other data available ... 10
Hydrologic conditions ... 10
Selected references ... 11
Gaging-station records ... 15-373
Discharge at ungaged sites ... 374
Discharge at partial-record stations and miscellaneous sites ... 375-404
  Low-flow partial-record stations ... 375
  Crest-stage partial-record stations ... 376-387
  Discharge measurements at miscellaneous sites ... 388-403
  Seepage investigations ... 404
Index ... 405

ILLUSTRATIONS

Figure 1. Map of Oregon showing location of gaging stations ... 12
2. General view of the acoustic velocity meter gaging station on the Columbia River at The Dalles, Oreg ... 13

TABLES

Table 1. Factors for conversion of English Units to International System (SI) Units ... 14

GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

THE GREAT BASIN Page
WARNER LAKES BASIN
Twentymile Creek (head of Warner Lakes basin) near Adel.............. 15
  Deep Creek
    Camas Creek near Lakeview.. 16
    Drake Creek near Adel.. 17
  Deep Creek above Adel.. 18
Hart Lake
  Honey Creek near Plush... 19
ABERT LAKE BASIN
Abert Lake near Valley Falls... 20
  Chewaucan River near Paisley... 21
SUMMER LAKE BASIN
  Ana River near Summer Lake... 22
SILVER LAKE BASIN
  Silver Creek near Silver Lake.. 23
MALHEUR AND HARNEY LAKES BASIN
Malheur Lake
  Silvies River near Burns... 24
    East Fork Silvies River near Lawen................................. 25
  West Fork Silvies River near Lawen..................................... 27
  Donner und Blitzen River near Frenchglen............................... 29
  Donner und Blitzen River near Voltage.................................. 30
  Malheur Lake outlet at Narrows... 32
Harney Lake
  Silver Creek near Riley.. 34
ALVORD LAKE BASIN
  Trout Creek near Denio, Nevada... 35
CENTRAL VALLEY IN OREGON-CALIFORNIA
Goose Lake (closed basin)
  Drews Creek near Lakeview.. 36
  Cottonwood Creek near Lakeview... 37
PACIFIC SLOPE BASINS IN CALIFORNIA
KLAMATH RIVER BASIN
Crater Lake near Crater Lake (closed basin).............................. 38
Williamson River (head of Klamath River) near Klamath Agency............. 39
  Sprague River near Beatty.. 40
  Sprague River near Chiloquin... 41
Williamson River below Sprague River, near Chiloquin..................... 42
Upper Klamath Lake (continuation of Williamson River)
  "A" Canal at Klamath Falls... 43
Upper Klamath Lake near Klamath Falls.................................... 44
Link River (continuation of Upper Klamath Lake) at Klamath Falls......... 45
Klamath River at Keno.. 46
Klamath River below John C. Boyle powerplant, near Keno.................. 47
Klamath River below Iron Gate Dam, Calif................................. 48
UPPER COLUMBIA RIVER BASIN
Columbia River below Priest Rapids Dam, Wash............................. 49
SNAKE RIVER BASIN
Snake River near Murphy, Idaho... 50

SNAKE RIVER BASIN--Continued Page

OWYHEE RIVER BASIN

Owyhee River near Rome.... 51
Lake Owyhee near Nyssa.... 52
Owyhee River below Owyhee Dam.... 53

MALHEUR RIVER BASIN

Malheur River near Drewsey.... 54
Warmsprings Reservoir near Riverside.... 55
Malheur River below Warmsprings Reservoir, near Riverside.... 56
North Fork Malheur River above Beulah Reservoir, near Beulah.... 57
Beulah Reservoir at Beulah.... 58
North Fork Malheur River at Beulah.... 59
Malheur River at Little Valley, near Hope.... 60
Bully Creek at Warmsprings, near Vale.... 61
Bully Creek Reservoir near Vale.... 62
Snake River at Weiser, Idaho.... 63

BURNT RIVER BASIN

North Fork Burnt River near Whitney.... 64
South Fork Burnt River above Barney Creek, near Unity.... 65
Unity Reservoir near Unity.... 66
Burnt River near Hereford.... 67
Burnt River near Bridgeport.... 68
Burnt River at Huntington.... 69

POWDER RIVER BASIN

Powder River near Sumpter.... 70
Powder River near Richland.... 71
Eagle Creek above Skull Creek, near New Bridge.... 72
Brownlee Reservoir at Brownlee Dam, Idaho-Oregon State line.... 73

PINE CREEK BASIN

Pine Creek near Oxbow.... 74
Snake River at Hells Canyon Dam, Idaho-Oregon State line.... 75

IMNAHA RIVER BASIN

Imnaha River at Imnaha.... 76

GRANDE RONDE RIVER BASIN

Grande Ronde River at Hilgard.... 77
Grande Ronde River at La Grande.... 78
Catherine Creek near Union.... 79
Grande Ronde River near Elgin.... 80

Wallowa River

East Fork Wallowa River near Joseph.... 81
Wallowa Lake near Joseph.... 82
Wallowa River at Joseph.... 83
Hurricane Creek near Joseph.... 84
Lostine River near Lostine.... 85
Bear Creek near Wallowa.... 86
Minam River at Minam.... 87
Grande Ronde River at Rondowa.... 88
Grande Ronde River at Troy.... 89
Snake River below Ice Harbor Dam, Wash.... 90

LOWER COLUMBIA RIVER BASIN

Columbia River

WALLA WALLA RIVER BASIN

Page

- South Fork Walla Walla River near Milton 91
  - North Fork Walla Walla River near Milton-Freewater 92
- Springs in Walla Walla River basin, Oregon-Washington 93

Columbia River at McNary Dam, near Umatilla 94

UMATILLA RIVER BASIN

- Umatilla River above Meacham Creek, near Gibbon 95
- Umatilla River near Cayuse 96
- Umatilla River at Pendleton 97
  - McKay Creek
    - North Fork McKay Creek near Pilot Rock 98
  - McKay Creek near Pilot Rock 99
  - McKay Reservoir near Pendleton 100
  - McKay Creek near Pendleton 101
  - Birch Creek
    - East Birch Creek near Pilot Rock 102
  - Birch Creek at Rieth 103
- Umatilla River at Yoakum 104
  - Butter Creek near Pine City 105
  - Principal diversions from Umatilla River between Yoakum and Umatilla gaging stations 106
- Umatilla River near Umatilla 107

WILLOW CREEK BASIN

- Willow Creek at Heppner 108
  - Rhea Creek near Heppner 109
- Willow Creek near Arlington 110

JOHN DAY RIVER BASIN

John Day River

- Strawberry Creek above Slide Creek, near Prairie City 111

John Day River near John Day 112

John Day River at Picture Gorge, near Dayville 113

- North Fork John Day River
  - Camas Creek near Ukiah 114
    - Snipe Creek near Ukiah 115
  - Middle Fork John Day River at Ritter 116
- North Fork John Day River at Monument 117

John Day River at Service Creek 118

John Day River at McDonald Ferry 119

DESCHUTES RIVER BASIN

Deschutes River below Snow Creek, near La Pine 120

- Cultus River above Cultus Creek, near La Pine 121
  - Cultus Creek above Crane Prairie Reservoir, near La Pine 122
  - Deer Creek above Crane Prairie Reservoir, near La Pine 124
  - Quinn River near La Pine 125
    - Charlton Creek above Crane Prairie Reservoir, near La Pine 126

Crane Prairie Reservoir near La Pine 127

Deschutes River below Crane Prairie Reservoir, near La Pine 128

LOWER COLUMBIA RIVER BASIN--Continued
COLUMBIA RIVER--Continued
DESCHUTES RIVER BASIN--Continued

Page
Brown Creek near La Pine.. 129
Davis Lake basin (closed basin at head of Davis Creek)
Odell Creek near Crescent... 130
Wickiup Reservoir near La Pine.................................... 131
Deschutes River below Wickiup Reservoir, near La Pine................ 132
Fall River near La Pine... 133
Little Deschutes River
Crescent Lake near Crescent....................................... 134
Crescent Creek at Crescent Lake, near Crescent.................... 135
Little Deschutes River near La Pine............................... 136
Deschutes River at Benham Falls, near Bend........................ 137
Diversions from Deschutes River near Bend......................... 138
Deschutes River below Bend.. 139
Tumalo Creek near Bend.. 140
Squaw Creek near Sisters.. 141
Deschutes River near Culver....................................... 142
Beaver Creek (head of Crooked River) near Paulina.................. 143
Crooked River near Post... 144
Prineville Reservoir near Prineville.............................. 145
Crooked River near Prineville..................................... 146
Crooked River near Terrebonne..................................... 147
Crooked River below Opal Springs, near Culver..................... 148
Metolius River
Lake Creek near Sisters... 149
Metolius River near Grandview..................................... 150
Lake Billy Chinook near Metolius.................................. 151
Deschutes River near Madras....................................... 152
Shitike Creek at Warm Springs..................................... 153
Warm Springs River near Kahneeta Hot Springs....................... 154
White River near Government Camp.................................. 155
Clear Lake near Government Camp................................... 156
Clear Creek below Clear Lake, near Government Camp................. 157
Clear Creek ditch near Government Camp............................ 158
Clear Creek near Pine Grove....................................... 159
White River below Tygh Valley..................................... 160
Deschutes River at Moody, near Biggs.............................. 161
Columbia River at The Dalles...................................... 162
MILL CREEK BASIN
Mill Creek
South Fork Mill Creek near The Dalles............................. 163
MOSIER CREEK BASIN
Mosier Creek near Mosier.. 164
HOOD RIVER BASIN
East Fork Hood River (head of Hood River)
West Fork Hood River near Dee..................................... 165
Hood River at Tucker Bridge, near Hood River....................... 166

LOWER COLUMBIA RIVER BASIN--Continued

COLUMBIA RIVER--Continued

Page
Columbia River at Warrendale.. 167
Columbia River at Multnomah Falls.. 169
Columbia River at Washougal, Wash.. 171

SANDY RIVER BASIN

Sandy River

Salmon River near Government Camp.. 173
Sandy River near Marmot.. 174

Bull Run River

Blazed Alder Creek near Rhododendron... 175
Bull Run River near Multnomah Falls.. 176
North Fork Bull Run River near Multnomah Falls................................. 177
Bull Run Reservoir Number One, near Bull Run.................................... 178

South Fork Bull Run River

Cedar Creek near Brightwood.. 179
Bull Run Reservoir Number Two, near Bull Run.................................... 180
Bull Run River near Bull Run... 181
Little Sandy River near Bull Run... 182

WILLAMETTE RIVER BASIN

Middle Fork Willamette River near Oakridge...................................... 183
Hills Creek above Hills Creek Lake, near Oakridge................................ 184
Hills Creek Lake near Oakridge... 185
Middle Fork Willamette River above Salt Creek, near Oakridge..................... 186
Salmon Creek near Oakridge... 187
Waldo Lake near Oakridge... 188
Waldo Lake outlet near Oakridge.. 189
North Fork of Middle Fork Willamette River near Oakridge......................... 190
Middle Fork Willamette River below North Fork, near Oakridge..................... 191
Lookout Point Lake near Lowell... 192
Middle Fork Willamette River near Dexter.. 193
Fall Creek near Lowell... 194
Winberry Creek near Lowell... 195
Fall Creek Lake near Lowell.. 196
Fall Creek below Winberry Creek, near Fall Creek................................ 197
Middle Fork Willamette River at Jasper.. 198
Coast Fork Willamette River at London... 199
Cottage Grove Lake near Cottage Grove... 200
Coast Fork Willamette River below Cottage Grove Dam.............................. 201
Row River above Pitcher Creek, near Dorena...................................... 202
Dorena Lake near Cottage Grove.. 203
Row River near Cottage Grove.. 204
Mosby Creek at mouth, near Cottage Grove.. 205
Coast Fork Willamette River near Goshen... 206

Willamette River

McKenzie River at outlet of Clear Lake.. 207
Smith River above Smith River Reservoir, near Belknap Springs... 208
Smith River Reservoir near Belknap Springs...................................... 209

LOWER COLUMBIA RIVER BASIN--Continued
COLUMBIA RIVER--Continued
WILLAMETTE RIVER BASIN--Continued
Willamette River--Continued

Page
McKenzie River below Trail Bridge Dam, near Belknap Springs........ 210
McKenzie River at McKenzie Bridge.................................. 211
South Fork McKenzie River above Cougar Lake, near Rainbow........ 212
Cougar Lake near Rainbow.. 213
South Fork McKenzie River near Rainbow........................... 214
Blue River below Tidbits Creek, near Blue River.................. 215
Lookout Creek near Blue River.................................. 216
Blue River Lake near Blue River.................................. 217
Blue River at Blue River... 218
McKenzie River near Vida... 219
Gate Creek at Vida... 220
Mohawk River near Springfield.................................... 221
Willamette River at Harrisburg.. 222
Long Tom River near Noti... 223
Coyote Creek near Crow... 224
Fern Ridge Lake near Elmira.. 225
Long Tom River near Alvadore....................................... 226
Amazon Creek at Eugene... 227
Long Tom River at Monroe... 228
Marys River near Philomath... 229
Calapooia River at Holley... 230
Calapooia River at Albany... 231
Willamette River at Albany.. 232
North Santiam River (head of Santiam River) below Boulder Creek, near Detroit.. 233
Breitenbush River above Canyon Creek, near Detroit.............. 234
Detroit Lake near Detroit... 235
North Santiam River at Niagara...................................... 236
Little North Santiam River near Mehama........................... 237
North Santiam River at Mehama....................................... 238
South Santiam River below Cascadia............................... 239
Middle Santiam River near Cascadia............................. 240
Quartzville Creek near Cascadia.............................. 241
Green Peter Lake near Foster................................... 242
Foster Lake at Foster.. 243
South Santiam River at Foster..................................... 244
Wiley Creek near Foster.. 245
South Santiam River near Foster................................... 246
South Santiam River at Waterloo................................... 247
Thomas Creek near Scio... 248
Santiam River at Jefferson.. 249
Luckiamute River near Hoskins....................................... 250
Luckiamute River near Suver... 251
Rickreall Creek near Dallas... 252
Willamette River at Salem... 253

LOWER COLUMBIA RIVER BASIN--Continued
COLUMBIA RIVER--Continued
WILLAMETTE RIVER BASIN--Continued

Page
Willamette River--Continued
Mill Creek at Salem 254
South Yamhill River (head of Yamhill River) near Willamina 255
Willamina Creek near Willamina 256
Mill Creek near Willamina 257
South Yamhill River near Whiteson 258
North Yamhill River near Fairdale 259
Haskins Creek Reservoir near McMinnville 260
Haskins Creek below reservoir, near McMinnville 261
North Yamhill River at Pike 262
Willamette River at Wilsonville 263
Molalla River above Pine Creek, near Wilhoit 264
Molalla River near Canby 265
Pudding River
Silver Creek at Silverton 266
Butte Creek at Monitor 267
Tualatin River at Gaston 268
Scoggins Creek above Henry Hagg Lake near Gaston 269
Sain Creek near Gaston 270
Scoggins Creek near Gaston 271
Tualatin River near Dilley 272
Gales Creek near Forest Grove 273
Dairy Creek near Verboort 274
McKay Creek near Hillsboro 275
Tualatin River at Farmington 276
Oswego Canal near Lake Oswego 277
Tualatin River at West Linn 278
Clackamas River
Timothy Lake near Government Camp 279
Oak Grove Fork near Government Camp 280
Oak Grove Fork above powerplant intake 281
Clackamas River above Three Lynx Creek 282
Clackamas River at Estacada 283
Clackamas River near Clackamas 284
Johnson Creek at Sycamore 285
Willamette River at Portland 286
Columbia River at Columbia City 287
Columbia River at Rainier 289
Columbia River at Wauna 291

BEAR CREEK BASIN

Bear Creek near Svensen 293

PACIFIC SLOPE BASINS IN OREGON

NEHALEM RIVER BASIN

Nehalem River near Foss 294

WILSON RIVER BASIN

Wilson River near Tillamook 295

PACIFIC SLOPE BASINS IN OREGON--Continued

NESTUCCA RIVER BASIN

Page
McGuire Lake near Fairdale........ 296
Nestucca River near Fairdale........ 297
Nestucca River near Beaver........ 298
SILETZ RIVER BASIN
Siletz River at Siletz........ 299
YAQUINA RIVER BASIN
Yaquina River near Chitwood........ 300
  Mill Creek near Toledo........ 301
ALSEA RIVER BASIN
North Fork Alsea River at Alsea........ 302
  Five Rivers near Fisher........ 303
Alsea River near Tidewater........ 304
  Drift Creek
    Needle Branch near Salado........ 305
    Meadow Creek
      Flynn Creek near Salado........ 306
      Horse Creek
        Deer Creek near Salado........ 307
BIG CREEK BASIN
Big Creek near Roosevelt Beach........ 308
SIUSLAW RIVER BASIN
Siuslaw River
  Lake Creek near Deadwood........ 309
Siuslaw River near Mapleton........ 310
  North Fork Siuslaw River near Minerva........ 311
UMPQUA RIVER BASIN
South Umpqua River (head of Umpqua River)
  Jackson Creek near Tiller........ 312
South Umpqua River at Tiller........ 313
  Elk Creek near Drew........ 314
  Cow Creek near Azalea........ 315
    West Fork Cow Creek near Glendale........ 316
  Cow Creek near Riddle........ 317
    North Myrtle Creek near Myrtle Creek........ 318
  Lookingglass Creek
    Olalla Creek near Tenmile........ 319
      Tenmile Creek at Tenmile........ 320
  Lookingglass Creek at Brockway........ 321
South Umpqua River near Brockway........ 322
  Deer Creek near Roseburg........ 323
  North Umpqua River
    Silent Creek near Diamond Lake........ 324
    Diamond Lake near Diamond Lake........ 325
    Lake Creek near Diamond Lake........ 326
  Lemolo Lake near Toketee Falls........ 327
  North Umpqua River below Lemolo Lake, near Toketee Falls........ 328

PACIFIC SLOPE BASINS IN OREGON--Continued
UMPQUA RIVER BASIN--Continued
North Umpqua River--Continued

Page

Clearwater River above Trap Creek, near Toketee Falls............ 329
Fish Creek at Big Camas ranger station, near Toketee Falls....... 330
North Umpqua River above Copeland Creek, near Toketee Falls........ 331
Steamboat Creek near Glide.............................. 332
Rock Creek near Glide.............................. 333
Little River at Peel.............................. 334
North Umpqua River at Winchester.............................. 335

Umpqua River

Calapooya Creek near Oakland.............................. 336
Umpqua River near Elkton.............................. 337
Elk Creek near Drain.............................. 338
Smith River near Gardiner.............................. 339

TENMILE CREEK BASIN

Tenmile Creek near Lakeside.............................. 340
Eel Lake near Lakeside.............................. 341

COOS RIVER BASIN
South Fork Coos River
Millicoma River

West Fork Millicoma River near Allegany.............................. 342

COQUILLE RIVER BASIN

South Fork Coquille River near Illahe.............................. 343
South Fork Coquille River at Powers.............................. 344
North Fork Coquille River near Fairview.............................. 345

ROGUE RIVER BASIN

Rogue River above Prospect.............................. 346
Rogue River below Prospect.............................. 347
South Fork Rogue River near Prospect.............................. 348

Middle Fork Rogue River

Red Blanket Creek near Prospect.............................. 349
South Fork Rogue River, south of Prospect.............................. 350
South Fork Big Butte Creek near Butte Falls.............................. 351
Big Butte Creek near McLeod.............................. 352
Rogue River near McLeod.............................. 353
Elk Creek near Cascade Gorge.............................. 354
Elk Creek near Trail.............................. 355
Rogue River at Dodge Bridge, near Eagle Point.............................. 356
South Fork Little Butte Creek near Lakecreek.............................. 357
North Fork Little Butte Creek at Fish Lake, near Lakecreek....... 358
North Fork Little Butte Creek near Lakecreek.............................. 359

Emigrant Creek (head of Bear Creek)

Emigrant Creek near Ashland.............................. 360
Bear Creek at Medford.............................. 361
Rogue River at Raygold, near Central Point.............................. 362
Rogue River at Grants Pass.............................. 363
Applegate River near Copper.............................. 364
Applegate River near Applegate.............................. 365
Grave Creek at Pease Bridge, near Placer.............................. 366

PACIFIC SLOPE BASINS IN OREGON--Continued

ROGUE RIVER BASIN--Continued

Page
Rogue River near Agness.. 367
  East Fork Illinois River (head of Illinois River) near Takilma..... 368
    Sucker Creek below Little Grayback Creek, near Holland........... 369
    West Fork Illinois River below Rock Creek, near O'Brien.......... 370
    Illinois River near Kerby.. 371
    Illinois River near Agness....................................... 372

CHETCO RIVER BASIN

Chetco River near Brookings... 373

WATER RESOURCES DATA FOR OREGON, 1973

PART 1. SURFACE WATER RECORDS

INTRODUCTION

Surface-water records for the 1973 water year for Oregon, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report and their locations shown in figure 1. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of S. F. Kapustka, district chief. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Oregon.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States."

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 have also been published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65," and those for 1966-70 will also be published in a water-supply paper series.

COOPERATION

The U.S. Geological Survey and organizations of the State of Oregon have had cooperative agreements for the systematic collection of surface-water records since 1905. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

State of Oregon, C. L. Wheeler, State Engineer.

Oregon State Game Commission, John W. McKean, Director.

Oregon State Board of Higher Education, Roy E. Lieuallan, Chancellor.

Oregon State Highway Commission, G. L. Jackson, Chairman.

Coos, Douglas, and Lane Counties.

Cities of Astoria, Coos Bay-North Bend, Eugene, Lakeside, McMinnville, Portland, The Dalles, and Toledo.

Burnt River Irrigation District.

Assistance in the form of funds or services was given by the Forest Service, U.S. Department of Agriculture; Corps of Engineers, U.S. Army; Bonneville Power Administration, Bureau of Reclamation, Fish and Wildlife Service, Environmental Protection Agency, and Bureau of Land Management, U.S. Department of the Interior; National Weather Service, U.S. Department of Commerce; Eugene Water & Electric Board; Pacific Power & Light Co.; Portland General Electric Co.; Idaho Power Co., Idaho; Cowlitz County & Clark County Public Utility Districts, Washington.

DEFINITION OF TERMS

Definition of terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

Acre-foot(AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile(CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second(cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height(G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Runoff in inches(IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream.

Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 14335500, includes the part number "14" and a 6-digit station number. In this report, the records are listed in downstream order by parts. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consists of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. (See also SELECTED REFERENCES.) Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods.

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. Information required for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figures to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised: "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. For some reservoirs the elevation at a given time is given in the daily table.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures; it is the total cubic feet per second per day for the month. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas or if the average rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month. If elevation or gage height is given in the daily table, the monthly summary gives the contents at the end of the month, rather than the elevation or gage height. The yearly summary gives the change in contents for the calendar year and for the water year.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges for the calendar and water years; likewise, the minimums in this summary are the minimum daily discharges.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE" certain periods are indicated for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Oregon for the period October 1960 to September 1965 are in Water-Supply Papers 1927, 1929, 1931, 1934, and 1935.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1314(10), 1315-B (11-A), and 1315-A(11-B), 1317(13), 1318(14); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1734(10), 1735(11), 1737(13), 1738(14). These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other Data Available

Monthly records for several ungaged sites are given in a separate section following the gaged sites. The accuracy of records for ungaged sites is generally lower than those for gaged sites, depending on the precision of the computation method and the accuracy of data used in the computations.

Data collected at partial-record stations and at miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height record, and rating tables, is on file in the district office. Many gaging-station records in Oregon through 1967 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each y year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

Records of Discharge Collected by Agencies Other than the Geological Survey

Records of discharge not published by the Geological Survey were collected in Oregon at other sites during the current water year by other State and Federal agencies. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA. 22092, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

HYDROLOGIC CONDITIONS

Streamflow for October to February was near normal for the State except in the Wilson River basin, where streamflow was deficient.

Deficient streamflow existed from March to September for the entire State except in the Wilson River basin, when streamflow was excessive during September.

The monthly mean discharge for John Day River at Service Creek was a new low for the period of record.

SELECTED REFERENCES

Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.

Corbett, D. M., and others, 1943, reprinted 1957, Stream-gageing procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

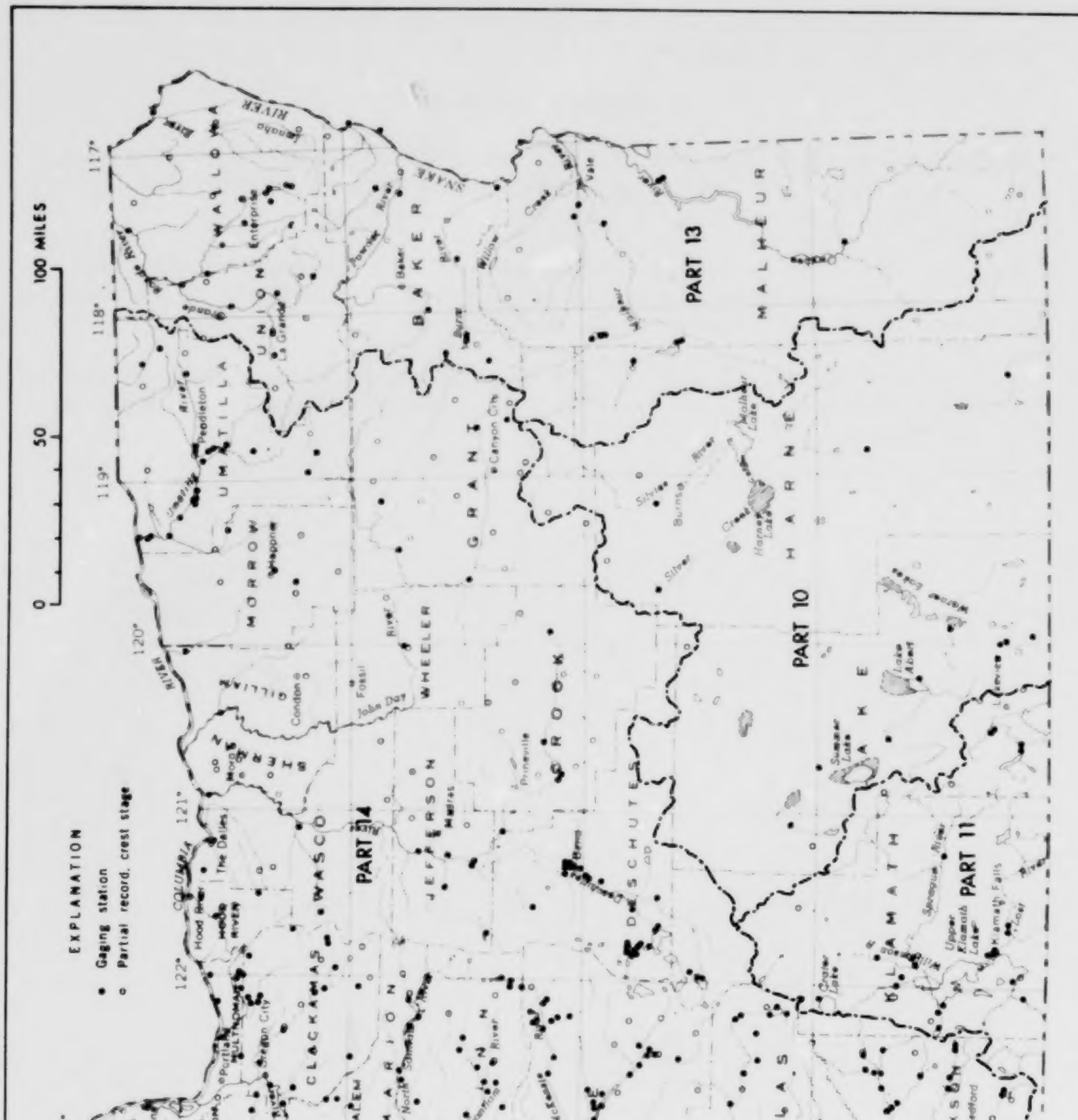
EXPLANATION
• Gaging station
○ Partial record, crest stage
0
50
100 MILES
124°
123°
122°
121°
120°
119°
118°
117°
46°
45°
44°
43°
42°
PART 10
PART 11
PART 13
PART 14
CLATSOP
COLUMBIA
WASHINGTON
TILLAMOOK
YAMHILL
MULTNOMAH
CLACKAMAS
HOOD RIVER
WASCO
SHERMAN
GILLIAM
MORROW
UMATILLA
UNION
WALLOWA
BAKER
GRANT
WHEELER
JEFFERSON
CROOK
DESCHUTES
MARION
POLK
LINCOLN
BENTON
LINN
LANE
DOUGLAS
COOS
CURRY
JOSEPHINE
JACKSON
KLAMATH
LAKE
HARNEY
MALHEUR
COLUMBIA RIVER
SNAKE RIVER
John Day River
Astoria
St Helens
Tillamook
Hillsboro
Portland
Oregon City
McMinnville
Dallas
Salem
Albany
Corvallis
Newport
Eugene
Roseburg
Coquille
Gold Beach
Grants Pass
Medford
Klamath Falls
Upper Klamath Lake
Crater Lake
Lakeview
Lake Abert
Summer Lake
Bend
Prineville
Madras
Condon
Fossil
Moro
The Dalles
Hood River
Heppner
Pendleton
La Grande
Enterprise
Baker
Canyon City
Burns
Harney Lake
Malheur Lake
Vale
Silvies River
Silver Creek
Sprague River
Umpqua
Rogue River

Figure 1.--Map of Oregon showing location of gaging stations.

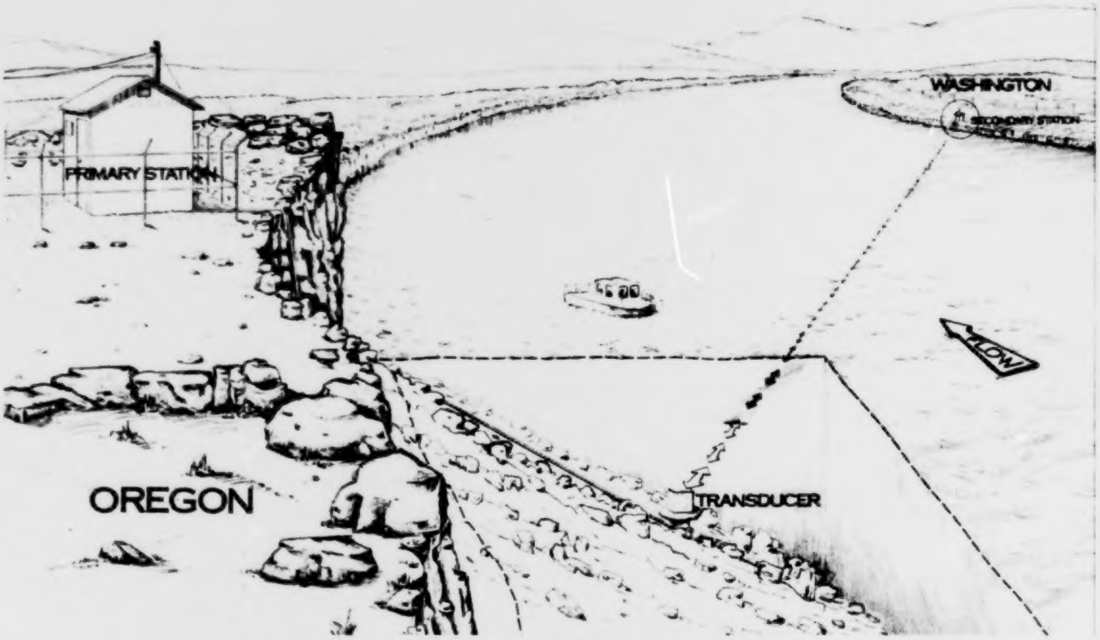
PRIMARY STATION
WASHINGTON
SECONDARY STATION
FLOW
TRANSDUCER
OREGON

Figure 2.--General view of the acoustic velocity meter gaging station on the Columbia River at The Dalles, Oregon, in the upper reach of Bonneville reservoir. The acoustic path at this site crosses the river at an oblique angle of about 53 degrees and has a length of 1,320 feet. An underwater transducer is installed on each side of the river at approximately 0.4 of the depth below the minimum water surface.

FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM (SI) UNITS

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
	Length	
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
	Area	
acres	4047	square metres (m^2)
	.4047	square hectometre (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
	Volume	
cubic feet (ft^3)	.02832	cubic metres (m^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
	Flow	
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	.02832	cubic metres per second (m^3/s)
	Mass	
ton (short)	.9072	tonne (t)

WARNER LAKES BASIN

10366000 TWENTYMILE CREEK NEAR ADEL, OREG.

LOCATION.--Lat 42°04'20", long 119°57'42", in SW¼NW¼ sec.25, T.40 S., R.23 E., Lake County, on left bank 1.5 mi (2.4 km) downstream from Twelvemile Creek and 8 mi (13 km) southwest of Adel.

DRAINAGE AREA.--194 mi² (502 km²), including 46 mi² (119 km²) in Cowhead Lake area.

PERIOD OF RECORD.--March 1910 to July 1916, December 1917 to September 1919, and March 1921 to June 1922 (published as "near Warner Lake"), September 1940 to November 1944, March 1945 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,560.83 ft (1,390.141 m) above mean sea level. Prior to Sept. 21, 1940, nonrecording gage or water-stage recorder at sites within 1 mi (2 km) downstream at various datums. Sept. 21, 1940, to Nov. 30, 1944, water-stage recorder at site 1.8 mi (2.9 km) upstream at different datums. Mar. 12, 1945, to June 28, 1952, water-stage recorder at site 70 ft (21 m) upstream at datum 0.88 ft (0.268 m) higher.

AVERAGE DISCHARGE.--38 years (1910-15, 1918-19, 1940-44, 1945-73), 52.0 ft³/s (1.473 m³/s), 37,670 acre-ft/yr (46.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 869 ft³/s (24.6 m³/s) Jan. 13; maximum gage height, 6.87 ft (2.094 m) Jan. 12, backwater from ice; minimum daily discharge, 1.5 ft³/s (0.042 m³/s) July 31, Aug. 7-10, 12, 13.

Period of record: Maximum discharge, 3,670 ft³/s (104 m³/s) Dec. 23, 1964, gage height, 16.1 ft (4.91 m), from rating curve extended above 920 ft³/s (26.1 m³/s) on basis of contracted-opening measurement of 3,260 ft³/s (92.3 m³/s); no flow at times.

REMARKS.--Records good. Some regulation by pumpage from Cowhead Lake. Diversions in Oregon for irrigation above station; considerable diversions for irrigation in Cowhead Lake area in California.

REVISIONS (WATER YEARS).--WSP 1090: 1945. WSP 1514: 1951-53, 1954(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	7.2	7.5	9.0	7.2	214	85	64	51	6.1	1.8	3.2
2	5.8	6.8	8.0	8.5	8.0	98	52	69	45	6.1	2.0	3.2
3	5.4	6.8	7.5	8.2	7.2	58	68	76	42	5.8	2.0	3.5
4	5.4	10	5.4	7.9	7.2	32	87	80	34	5.8	1.8	3.2
5	5.4	9.2	4.8	7.5	7.2	28	172	73	31	5.8	1.8	3.2
6	5.4	7.2	4.1	7.2	7.5	35	258	74	28	5.4	1.8	3.0
7	5.8	7.5	4.1	7.0	7.5	26	200	77	27	5.0	1.5	3.0
8	5.8	8.6	4.1	7.6	7.5	55	160	81	26	5.0	2.0	3.2
9	5.8	7.2	4.1	8.6	8.0	92	196	76	25	5.0	1.8	3.5
10	6.1	7.2	4.8	9.6	8.6	244	208	78	24	4.4	1.5	3.2
11	6.8	8.0	6.4	11	8.6	168	188	84	22	4.4	1.8	3.2
12	7.5	6.8	8.0	100	8.0	94	190	96	14	4.4	1.5	3.2
13	8.0	6.8	11	400	7.2	61	146	113	14	3.8	1.5	3.0
14	7.2	7.5	9.0	50	8.0	34	147	132	14	3.5	1.8	3.2
15	7.2	8.6	10	30	8.0	33	200	137	12	3.5	1.8	3.2
16	8.0	8.6	11	100	8.6	62	136	150	12	3.8	2.2	3.2
17	7.5	8.6	13	25	8.0	101	130	142	12	4.4	2.8	3.2
18	6.8	7.2	19	15	7.8	73	98	156	12	4.4	2.8	3.2
19	6.8	7.2	55	11	7.8	53	65	150	12	3.8	2.5	3.8
20	6.4	7.2	40	9.6	8.2	110	56	132	11	4.0	2.5	5.8
21	6.4	5.8	40	9.2	8.6	116	41	107	10	4.4	2.5	5.4
22	6.4	5.8	50	10	9.7	88	53	91	8.0	4.0	2.5	4.7
23	6.4	5.8	28	14	15	78	76	85	8.0	3.8	2.8	4.7
24	6.4	7.2	19	14	28	122	64	106	7.5	3.8	3.0	5.0
25	6.1	7.5	16	9.7	51	172	57	106	7.5	3.8	3.2	6.1
26	6.1	8.0	14	7.5	49	168	56	77	6.8	3.8	3.5	5.4
27	5.8	9.2	12	9.0	43	132	72	64	6.8	2.5	3.5	4.7
28	6.1	9.7	10	11	167	89	78	57	6.4	2.0	3.2	4.7
29	6.1	9.2	8.5	7.5	------	68	78	52	6.4	2.0	3.2	4.4
30	5.4	7.5	9.0	8.0	------	66	67	52	6.4	2.0	3.0	4.4
31	5.8	------	9.0	7.2	------	80	------	56	------	1.5	3.0	------
TOTAL	195.9	229.9	452.3	939.8	527.4	2,850	3,484	2,893	541.8	128.0	72.6	116.7
MEAN	6.32	7.66	14.6	30.3	18.8	91.9	116	93.3	18.1	4.13	2.34	3.89
MAX	8.0	10	55	400	167	244	258	156	51	6.1	3.5	6.1
MIN	5.4	5.8	4.1	7.0	7.2	26	41	52	6.4	1.5	1.5	3.0
AC-FT	389	456	897	1,860	1,050	5,650	6,910	5,740	1,070	254	144	231

CAL YR 1972 TOTAL 33,719.6 MEAN 92.1 MAX 2,140 MIN 4.0 AC-FT 66,880
WTR YR 1973 TOTAL 12,431.4 MEAN 34.1 MAX 400 MIN 1.5 AC-FT 24,660

PEAK DISCHARGE (BASE, 510 CFS).--Jan. 13 (1900) 869 cfs (6.23 ft).

10370000 CAMAS CREEK NEAR LAKEVIEW, OREG.

LOCATION.--Lat 42°12'59", long 120°06'05", in SE¼NE¼ sec.3, T.39 S., R.22 E., Lake County, on left bank 0.2 mi (0.3 km) downstream from Blue Creek and 12 mi (19 km) east of Lakeview.

DRAINAGE AREA.--63 mi² (163 km²), approximately.

PERIOD OF RECORD.--September 1912 to November 1914, March to May 1915, December 1949 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 5,472.41 ft (1,667.991 m) above mean sea level (State Highway Department bench mark). Sept. 11, 1912, to May 9, 1915, water-stage recorder or nonrecording gage at site 500 ft (152 m) upstream at different datum.

AVERAGE DISCHARGE.--25 years (1912-14, 1950-73), 46.6 ft³/s (1.320 m³/s), 33,760 acre-ft/yr (41.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge not determined, probably occurred Dec. 19; maximum gage height, 3.90 ft (1.189 m) Dec. 21, backwater from ice; minimum discharge, not determined.

Period of record: Maximum discharge, 3,190 ft³/s (90.3 m³/s) Dec. 23, 1964, gage height, 7.32 ft (2.231 m), from rating curve extended above 410 ft³/s (11.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.90 ft³/s (0.025 m³/s) Aug. 16, 1960.

REMARKS.--Records good. No regulation. Diversions for irrigation above station.

REVISIONS.--WSP 410: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	8.4	11	20	18	26	42	144	31	6.8	4.1	4.4
2	7.0	9.8	11	14	15	22	38	146	27	6.6	4.1	4.1
3	6.8	16	11	11	14	22	38	144	24	6.6	3.9	3.9
4	6.8	51	9.0	11	15	19	46	160	23	6.3	3.7	3.7
5	6.8	24	6.3	11	15	22	65	146	20	6.1	3.7	3.7
6	6.6	15	6.3	11	13	21	87	137	18	5.9	3.7	3.5
7	6.8	13	6.3	11	12	22	96	124	18	5.9	3.6	3.5
8	7.0	12	6.7	11	11	22	96	119	15	5.7	3.4	3.7
9	7.6	13	8.8	13	11	24	110	109	15	5.2	3.3	3.7
10	9.5	13	1	13	10	39	134	103	14	5.0	3.2	3.5
11	11	14	16	14	11	38	160	100	13	4.8	3.2	3.5
12	11	13	23	60	10	31	195	97	13	4.8	3.2	3.5
13	13	12	30	148	11	28	189	93	12	4.8	3.3	3.5
14	12	12	29	72	11	27	154	89	12	5.0	3.3	3.4
15	14	13	24	74	11	26	161	87	12	4.8	3.1	3.5
16	15	13	31	99	11	29	161	80	14	4.8	2.8	3.5
17	13	12	45	54	12	29	172	74	12	4.6	2.8	3.5
18	12	12	85	34	14	29	124	69	12	4.6	2.8	3.5
19	9.5	10	250	23	16	29	106	65	11	4.4	2.9	4.4
20	9.2	10	110	18	15	34	95	61	10	5.0	3.1	9.5
21	8.7	10	120	17	18	33	102	55	8.4	6.3	3.3	5.9
22	8.4	10	140	17	20	33	128	51	7.0	5.9	3.4	4.4
23	8.4	10	68	17	18	34	150	48	7.8	5.5	3.5	5.5
24	7.6	10	41	18	12	41	161	68	8.7	5.0	3.5	8.1
25	7.6	10	46	19	13	53	162	77	8.7	4.8	4.1	6.8
26	7.6	20	42	20	15	61	170	59	7.6	4.6	4.3	4.8
27	7.3	24	28	21	18	59	197	49	7.3	4.4	3.9	4.4
28	7.6	16	26	22	24	53	191	41	7.0	4.4	3.7	3.8
29	7.3	14	24	22	------	45	172	34	7.0	4.3	3.5	3.1
30	7.3	12	24	21	------	46	150	30	6.8	4.1	3.5	2.8
31	7.3	------	25	20	------	44	------	34	------	3.9	3.7	------
TOTAL	277.0	432.2	1.314.4	936	396	1.041	3.852	2.693	402.3	160.9	107.6	129.1
MEAN	8.94	14.4	42.4	30.2	14.1	33.6	128	86.9	13.4	5.19	3.47	4.30
MAX	15	51	250	148	24	61	197	160	31	6.8	4.3	9.5
MIN	6.6	8.4	6.3	11	10	19	38	30	6.8	3.9	2.8	2.8
AC-FT	549	857	2.610	1.860	785	2.060	7.640	5.340	798	319	213	256

CAL YR 1972 TOTAL 23.364.3 MEAN 63.8 MAX 437 MIN 5.9 AC-FT 46.340
WTR YR 1973 TOTAL 11.741.5 MEAN 32.2 MAX 250 MIN 2.8 AC-FT 23.290

PEAK DISCHARGE (BASE, 290 CFS).--Dec. 19 gage height and discharge unknown.

10371000 DRAKE CREEK NEAR ADEL, OREG.

LOCATION.--Lat 42°12'00", long 120°00'41", in NE¼SW¼ sec.9, T.39 S., R.23 E., Lake County, on right bank 800 ft (240 m) downstream from highway bridge and Parsnip Creek, 1.0 mi (1.6 km) upstream from mouth, and 6.5 mi (10.5 km) west of Adel.

DRAINAGE AREA.--67 mi^2 (174 km^2), approximately.

PERIOD OF RECORD.--March to May 1915, December 1922 to May 1923, December 1949 to December 1964, October 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 5,075.94 ft (1,547.147 m) above mean sea level (State Highway Department bench mark). Mar. 18 to May 10, 1915, and Dec. 21, 1922, to May 9, 1923, nonrecording gage at site 800 ft (240 m) upstream at different datums. Dec. 16, 1949, to June 21, 1951, at site 1,300 ft (396 m) upstream at different datum. June 22, 1951, to Dec. 23, 1964, at site 20 ft (6 m) upstream at datum 0.48 ft (0.146 m) higher.

AVERAGE DISCHARGE.--22 years (1950-64, 1965-73), 14.9 ft^3/s (0.422 m^3/s), 10,800 acre-ft/yr (13.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 547 ft^3/s (15.5 m^3/s) Jan. 12, gage height, 3.23 ft (0.985 m); minimum, 1.9 ft^3/s (0.054 m^3/s) June 16.

Period of record: Maximum discharge, 6,210 ft^3/s (176 m^3/s) Dec. 23, 1964, gage height, 8.9 ft (2.71 m), present datum, result of slope-area measurement; minimum, 0.40 ft^3/s (0.011 m^3/s) Jan. 11, 1963, result of freezeup.

REMARKS.--Records good. Some regulation by two reservoirs above station with combined capacity of 436 acre-ft (538,000 m^3). Diversions for irrigation above station.

REVISIONS (WATER YEARS). WSP 1564: 1923. WSP 1714: Drainage area. WSP 1927: 1956(M)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	8.8	8.2	6.4	7.0	66	13	10	6.4	7.0	5.8	5.8
2	8.2	8.8	8.2	5.4	7.0	66	11	10	6.4	6.4	5.8	5.8
3	8.2	10	8.2	5.0	7.0	15	12	9.4	6.4	7.0	5.2	5.8
4	8.2	12	7.8	5.0	7.0	12	20	13	7.0	6.4	5.2	5.8
5	8.2	8.8	7.6	5.0	7.6	12	31	11	7.0	5.8	5.2	5.2
6	8.2	8.8	7.6	5.0	7.6	12	35	10	6.4	5.2	5.2	5.2
7	8.2	9.4	7.6	5.0	8.8	12	25	8.8	6.4	5.2	4.6	5.8
8	8.2	8.8	7.8	5.0	13	16	22	8.2	7.0	5.2	4.6	5.8
9	8.8	8.8	7.8	5.6	13	22	43	7.6	7.0	5.2	4.6	5.8
10	8.8	8.8	7.8	12	12	45	58	7.0	7.0	5.2	4.6	5.8
11	8.8	8.8	8.0	23	9.4	29	71	7.0	7.6	5.2	4.6	5.8
12	8.8	8.8	8.8	148	8.2	15	86	7.0	7.0	5.2	4.6	5.2
13	9.4	8.8	9.6	163	8.0	11	66	7.0	7.0	5.2	4.6	5.2
14	8.8	9.4	11	52	7.6	9.4	38	7.0	7.6	5.2	4.6	5.2
15	8.8	9.4	12	35	7.6	8.2	34	7.6	7.6	5.2	4.6	5.2
16	9.4	9.4	15	75	7.6	12	22	7.6	7.0	5.2	4.6	5.2
17	8.8	8.8	18	34	7.6	13	21	7.6	7.0	5.2	4.6	5.8
18	8.8	8.8	21	22	7.2	10	16	7.6	7.0	5.2	4.6	5.8
19	8.8	8.8	19	19	7.2	9.4	12	7.0	6.4	5.2	4.6	5.8
20	8.8	8.8	16	18	8.8	10	10	7.0	6.4	5.2	4.6	7.0
21	8.8	8.2	17	15	10	12	9.4	7.0	6.4	5.8	4.6	6.4
22	8.8	8.2	24	16	13	8.8	9.4	6.4	6.4	5.8	5.2	6.4
23	8.8	8.2	16	17	27	7.0	19	6.4	7.6	5.2	5.2	6.4
24	8.8	8.2	12	16	56	8.2	18	7.0	7.6	5.2	5.2	8.2
25	8.8	9.4	9.4	7.6	52	16	15	7.0	7.6	5.2	5.8	6.4
26	8.8	9.4	9.4	8.0	42	18	12	7.0	7.6	5.2	5.8	6.0
27	8.2	8.8	8.8	9.0	46	14	11	6.4	7.0	5.8	5.8	5.8
28	8.2	8.2	8.4	11	101	12	12	5.8	7.0	5.8	5.2	5.6
29	8.2	8.2	7.8	11	------	10	11	5.8	7.0	5.8	5.2	5.5
30	8.8	8.2	8.0	7.6	------	11	11	5.8	7.0	5.8	5.8	5.4
31	8.8	------	8.0	7.4	------	12	------	5.8	------	5.8	5.8	------
TOTAL	267.4	267.8	345.8	774.0	516.2	534.0	773.8	237.8	208.8	172.0	156.4	175.1
MEAN	8.63	8.93	11.2	25.0	18.4	17.2	25.8	7.67	6.96	5.55	5.05	5.84
MAX	9.4	12	24	163	101	66	86	13	7.6	7.0	5.8	8.2
MIN	8.2	8.2	7.6	5.0	7.0	7.0	9.4	5.8	6.4	5.2	4.6	5.2
AC-FT	530	531	686	1.540	1.020	1.060	1.530	472	414	341	310	347

CAL YR 1972 TOTAL 9.978.5 MEAN 27.3 MAX 1.090 MIN 7.0 AC-FT 19.790
WTR YR 1973 TOTAL 4.429.1 MEAN 12.1 MAX 163 MIN 4.6 AC-FT 8.790

PEAK DISCHARGE (BASE, 150 CFS).—Jan. 12 (1500) 547 cfs (3.23 cfs); Feb. 28 (2000) 218 cfs (2.48 ft).

10371500 DEEP CREEK ABOVE ADEL, OREG.

LOCATION.--Lat 42°11'21", long 120°00'02", in SW¼NW¼ sec.15, T.39 S., R.23 E., Lake County, on left bank 700 ft (213 m) downstream from Drake Creek and 5 mi (8 km) west of Adel.

DRAINAGE AREA.--249 mi^2 (645 km^2).

PERIOD OF RECORD.--September 1922 to September 1923, October 1929 to current year. Monthly discharge only October 1929 to September 1932, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 4,980.34 ft (1,518.008 m) above mean sea level (State Highway Department bench mark). Sept. 8 to Dec. 20, 1922, nonrecording gage. Dec. 21, 1922, to Sept. 30, 1923, and Oct. 11, 1929, to Dec. 23, 1964, water-stage recorder at site 700 ft (213 m) downstream at different datums. Jan. 20 to Sept. 30, 1965, nonrecording gage at site 2,000 ft (610 m) downstream at different datum.

AVERAGE DISCHARGE.--45 years, 128 ft^3/s (3,625 m^3/s), 92,740 acre-ft/yr (114 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 735 ft^3/s (20.8 m^3/s) Jan. 13, gage height, 3.05 ft (0.930 m); maximum gage height, 4.77 ft (1.454 m) Jan. 12, backwater from ice; minimum discharge, 7.5 ft^3/s (0.21 m^3/s) Aug. 18.

Period of record: Maximum discharge, 9,420 ft^3/s (267 m^3/s) Dec. 23, 1964, gage height, 10.64 ft (3.243 m), from floodmark, from rating curve extended above 1,100 ft^3/s (31.2 m^3/s) on basis of slope-area measurements at 7.3 ft (2.2 m) and of peak flow; minimum, 1.7 ft^3/s (0.048 m^3/s) July 20, 27-29, 1934.

REMAKRS.--Records good. No regulation. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	33	32	70	45	150	113	336	182	15	9.0	10
2	28	34	33	64	45	91	102	344	155	14	9.0	10
3	27	38	32	60	48	75	96	360	140	14	9.0	11
4	27	104	30	58	54	70	115	430	123	13	9.0	11
5	26	70	24	57	54	62	165	410	111	13	9.0	11
6	26	47	20	57	51	67	230	360	92	11	8.5	11
7	27	42	20	57	52	61	233	336	80	11	8.5	11
8	27	40	20	58	58	72	215	344	68	11	8.5	12
9	28	35	20	66	58	89	270	336	65	11	8.5	12
10	34	42	20	74	54	182	332	320	58	11	8.5	12
11	41	38	27	91	54	145	400	324	56	11	8.5	11
12	42	33	40	390	54	104	505	348	49	11	9.0	11
13	42	40	60	560	55	87	490	385	48	11	9.0	11
14	40	40	45	266	54	75	360	445	48	11	9.0	12
15	42	40	70	230	52	73	365	470	47	11	9.0	13
16	47	41	130	344	49	94	352	490	41	11	8.5	13
17	42	34	210	185	52	96	385	480	45	11	8.0	13
18	38	34	330	135	51	83	276	475	45	11	8.0	14
19	34	37	390	92	61	96	239	470	40	11	8.5	16
20	34	28	288	84	59	107	206	415	35	11	9.0	37
21	33	27	292	82	47	109	206	328	28	14	9.0	32
22	32	27	415	82	51	106	256	284	23	14	9.0	21
23	32	30	206	88	64	104	320	266	22	13	9.0	23
24	31	34	133	106	100	133	332	460	23	12	10	44
25	30	37	119	65	98	168	352	522	23	11	10	42
26	31	48	107	67	92	172	380	348	21	11	11	25
27	27	34	87	70	104	155	465	266	19	10	11	21
28	31	30	73	107	175	129	475	224	17	9.6	10	20
29	24	29	64	85	------	109	430	194	17	9.6	9.6	19
30	31	32	70	62	------	115	360	185	15	9.6	9.0	18
31	32	------	76	50	------	113	------	200	------	9.6	9.6	------
TOTAL	1.014	1.178	3.483	3.862	1.791	3.292	9.025	11.155	1.736	357.4	281.2	527
MEAN	32.7	39.3	112	125	64.0	106	301	360	57.9	11.5	9.07	17.6
MAX	47	104	415	560	175	182	505	522	182	15	11	44
MIN	24	27	20	50	45	61	96	185	15	9.6	8.0	10
AC-FT	2.010	2.340	6.910	7.660	3.550	6.530	17.900	22.130	3.440	709	558	1.050

CAL YR 1972 TOTAL 82.164.0 MEAN 224 MAX 2.760 MIN 15 AC-FT 163.000
WTR YR 1973 TOTAL 37.701.6 MEAN 103 MAX 560 MIN 8.0 AC-FT 74.780

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-13	1800	3.05	735	5-24	1530	2.91	658
4-13	0200	3.00	700				

10378500 HONEY CREEK NEAR PLUSH, OREG.

LOCATION.--Lat 42°25'30", long 119°55'20", in SW¼SW¼ sec.20, T.36 S., R.24 E., Lake County, on right bank 700 ft (213 m) upstream from mouth of canyon, 1 mi (1.6 km) northwest of Plush, and 4 mi (6.4 km) downstream from Twelvemile Creek.

DRAINAGE AREA.--170 mi^2 (440 km^2), approximately.

PERIOD OF RECORD.--May 1909 to September 1914 (prior to January 1910, gage heights only), March to May 1915, March to September 1921, March to June 1922, May 1930 to current year. Monthly discharge only May 1930 to September 1949, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is 4,552.60 ft (1,387.632 m) above mean sea level. Dec. 24, 1964, to Sept. 30, 1965, nonrecording gage at site 100 ft (30 m) downstream at different datums. See WSP 1927 for history of changes prior to Dec. 24, 1964.

AVERAGE DISCHARGE.--47 years (1910-14, 1930-73), 29.7 ft^3/s (0.84 m^3/s), 21,520 acre-ft/yr (26.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 191 ft^3/s (5.41 m^3/s) Apr. 27, gage height, 3.80 ft (1.158 m); minimum, 0.10 ft^3/s (0.003 m^3/s) July 31, Aug. 1.

Period of record: Maximum discharge, 11,000 ft^3/s (312 m^3/s) Dec. 23, 1964, gage height, 13.4 ft (4.08 m), from floodmark, from rating curve extended above 250 ft^3/s (7.08 m^3/s) on basis of slope-area measurements at gage height 10.46 ft (3.188 m) and of peak flow; no flow at times.

REMARKS.--Records good. Slight regulation by five small reservoirs, combined capacity, 870 acre-ft (1.07 hm^3). Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1564: 1911-12. WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	5.2	9.7	8.0	7.2	29	12	82	34	1.9	1.8	.80
2	2.5	6.2	7.6	7.8	8.0	16	12	85	33	2.1	5.0	.90
3	2.5	6.0	6.8	7.4	9.2	15	12	90	34	1.8	5.8	1.0
4	2.5	7.9	5.8	7.0	10	14	15	95	35	1.5	6.5	1.0
5	2.5	12	5.4	6.6	11	11	20	93	34	1.3	3.7	1.0
6	2.7	8.5	4.2	6.4	12	13	23	130	31	1.0	1.2	1.0
7	3.1	7.0	4.2	6.2	13	10	25	139	29	1.0	.80	.90
8	3.3	7.3	4.2	6.6	16	12	26	117	28	.80	.60	1.0
9	3.7	6.2	4.2	7.4	14	13	29	100	22	.60	.50	1.1
10	2.7	6.8	4.2	8.2	15	17	35	88	21	.40	.50	1.2
11	3.5	7.0	4.6	16	14	18	53	81	22	.40	.50	1.1
12	4.8	6.0	5.4	42	14	15	73	78	18	.30	.50	1.1
13	5.2	6.5	7.0	60	11	14	132	75	17	.20	.50	.90
14	5.5	7.0	6.0	49	14	11	124	84	17	.20	.50	.90
15	5.5	7.0	5.0	32	14	11	134	81	21	.20	.50	1.1
16	6.5	7.3	5.5	38	14	14	116	82	21	.20	.50	1.1
17	6.5	6.5	6.5	30	14	14	118	81	21	.20	.50	1.0
18	5.8	6.2	10	21	12	11	88	79	20	.20	.50	.90
19	5.5	7.3	27	15	11	14	70	80	21	.20	.50	.80
20	5.2	6.5	32	11	12	13	56	81	19	.20	.50	1.1
21	5.0	6.8	24	9.0	12	14	47	76	11	.20	.50	2.5
22	5.2	5.8	18	7.8	12	13	50	70	9.1	.20	.50	2.2
23	5.0	5.0	15	8.4	13	10	90	68	9.4	.20	.50	1.9
24	5.0	7.0	12	9.2	18	10	123	74	9.7	.20	1.7	1.8
25	4.8	7.9	13	8.6	19	13	124	98	9.7	.40	6.5	2.3
26	4.8	8.5	14	8.0	16	15	132	67	7.6	.30	4.3	2.2
27	4.8	7.3	12	7.6	18	10	149	54	5.8	.30	1.4	1.8
28	4.8	8.5	9.0	9.0	23	13	135	46	5.0	.20	.90	1.7
29	5.0	8.5	7.5	9.8	-------	13	110	40	3.5	.20	.80	1.6
30	4.5	6.2	8.0	9.0	-------	13	90	36	2.0	.20	.70	1.4
31	4.5	-------	8.0	8.0	-------	12	-------	34	-------	.10	.80	-------
TOTAL	135.4	211.9	305.8	480.0	376.4	421	2,223	2,484	570.8	17.20	50.00	39.30
MEAN	4.37	7.06	9.86	15.5	13.4	13.6	74.1	80.1	19.0	.55	1.61	1.31
MAX	6.5	12	32	60	23	29	149	139	35	2.1	6.5	2.5
MIN	2.5	5.0	4.2	6.2	7.2	10	12	34	2.0	.10	.50	.80
AC-FT	269	420	607	952	747	835	4,410	4,930	1,130	34	99	78

CAL YR 1972 TOTAL 15,375.60 MEAN 42.0 MAX 682 MIN .60 AC-FT 30,500
WTR YR 1973 TOTAL 7,314.80 MEAN 20.0 MAX 149 MIN .10 AC-FT 14,510

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

10382000 ABERT LAKE NEAR VALLEY FALLS, OREG.

LOCATION.--Lat 42°36'13", long 120°11'09", in NW¼SE¼ sec.24, T.34 S., R.21 E., Lake County, 10 mi (16 km) northeast of Valley Falls, on east shore of lake.

DRAINAGE AREA.--860 mi² (2,230 km²), approximately.

PERIOD OF RECORD.--October 1915 to September 1918 (fragmentary), October 1961 to current year. Fragmentary records for period 1919 to 1961 available in files of Portland district office.

GAGE.--Nonrecording gage. Datum of gage is 4,247.78 ft (1,294.723 m) above mean sea level. Gage readings have been reduced to elevations above mean sea level. Prior to September 1961, nonrecording gage and various reference marks used, and September 1961 to July 3, 1963, water-stage recorder.

EXTREMES.--Current year: Maximum elevation observed, 4,259.58 ft (1,298.320 m) Mar. 7; minimum elevation observed, 4,258.38 ft (1,297.954 m) Nov. 15.

Period of record: Maximum elevation, 4,261.8 ft, from high-water mark, occurred during June 1972. Prior to 1905 a well defined beach line was formed at elevation 4,269.7 ft (1,301.40 m). Lake was dry in 1924; practically dry at times in 1926, 1930, 1931, and 1934.

REMARKS.--Records fair. Many diversions for irrigation on streams tributary to the Lake. The lake has no outlet and the water is highly mineralized.

AREA AND VOLUME OF ABERT LAKE

Altitude (ft)	Area (acres)	Volume (acre-ft)	Altitude (ft)	Area (acres)	Volume (acre-ft)
4,244±	dry	0	4,253	35,300	209,000
4,245	7,800	4,000	4,254	36,400	245,000
4,246	13,700	14,800	4,255	37,300	282,000
4,247	19,500	31,400	4,256	38,200	320,000
4,248	24,800	53,500	4,257	39,000	358,000
4,249	28,100	80,000	4,258	39,700	397,000
4,250	30,500	110,000	4,259	40,300	437,000
4,251	32,400	141,000	4,260	40,800	478,000
4,252	33,900	174,000	4,262	42,000	560,000

ELEVATION, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)
Nov. 14	4,258.38
Mar. 7	4,259.58

10384000 CHEWAUCAN RIVER NEAR PAISLEY, OREG.

LOCATION.--Lat 42°41'05", long 120°34'08", in SW¼NW¼ sec.26, T.33 S., R.18 E., Lake County, on left bank 1.2 mi (1.9 km) downstream from Mill Creek and 1.4 mi (2.3 km) southwest of Paisley.

DRAINAGE AREA.--275 mi² (712 km²).

PERIOD OF RECORD.--April 1912 to September 1921, May 1924 to current year. Published as "above Conn ditch, near Paisley" April to September 1912 and May 1924 to September 1955, as "above Mill Creek, near Paisley" October 1912 to December 1913, and as "at Chewaucan Land & Cattle Co.'s gage, near Paisley" January to September 1914.

GAGE.--Water-stage recorder. Datum of gage is 4,430 ft (1,350 m) above mean sea level (river-profile survey). See WSP 1734 for history of changes prior to Oct. 6, 1956.

AVERAGE DISCHARGE.--58 years, 143 ft³/s (4.050 m³/s), 103,600 acre-ft/yr (128 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 697 ft³/s (19.7 m³/s) Dec. 20, gage height, 3.08 ft (0.939 m); maximum gage height, 3.82 ft (1.164 m) Dec. 22, backwater from ice; minimum discharge, 12 ft³/s (0.340 m) Dec. 5.

Period of record: Maximum discharge, 6,490 ft³/s (184 m³/s) Dec. 22, 1964, gage height, 8.35 ft (2.545 m), from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of slope-area measurement of peak flow; no flow for part of each day Dec. 7, 1927, Dec. 12, 1932, result of freezeup.

REMARKS.--Records good. No regulation. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 860: Drainage area. WSP 1927: 1957-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	60	64	60	60	129	101	356	206	44	17	24
2	36	53	68	57	66	89	83	356	181	43	19	25
3	37	52	54	56	67	86	87	366	169	41	20	25
4	38	78	23	50	63	81	96	372	157	40	19	25
5	36	74	23	53	63	48	117	364	166	38	21	24
6	31	57	23	54	70	63	139	364	137	36	19	24
7	36	54	26	55	63	73	146	332	131	35	19	24
8	35	56	28	58	64	95	155	332	121	35	17	25
9	38	60	29	70	69	86	186	332	106	33	18	24
10	43	53	36	90	67	117	215	332	99	33	18	26
11	56	60	42	219	66	111	232	328	95	31	19	25
12	66	65	56	250	63	69	265	364	91	29	19	26
13	61	52	60	253	61	86	279	368	87	29	19	24
14	68	53	90	148	66	74	265	400	89	29	20	24
15	62	54	150	133	60	77	259	416	89	30	19	24
16	61	53	201	238	63	96	262	485	86	29	24	24
17	55	48	368	166	66	92	326	485	84	30	24	24
18	49	43	495	106	54	77	253	480	83	33	23	24
19	46	55	570	78	53	87	227	460	75	35	23	26
20	44	45	548	67	63	89	287	435	65	38	22	38
21	42	38	425	64	62	96	282	372	65	40	22	47
22	42	36	300	66	63	66	229	332	61	34	22	39
23	41	46	159	67	70	90	242	294	61	31	22	46
24	40	47	117	64	92	95	286	336	62	29	23	40
25	40	54	99	66	110	111	316	400	57	26	32	57
26	40	66	91	59	101	110	360	304	55	24	32	41
27	40	62	87	52	108	111	425	259	51	24	28	39
28	43	61	61	70	117	104	650	238	50	23	26	37
29	39	54	67	78	------	95	608	219	47	21	25	35
30	38	46	56	73	------	101	376	213	45	20	24	34
31	41	------	62	66	------	97	------	235	------	18	24	------
TOTAL	1,392	1,588	4,387	2,972	1,996	2,876	7,226	10,878	2,849	980	679	940
MEAN	44.9	52.9	142	95.9	71.3	92.7	241	351	95.0	31.6	21.9	31.3
MAX	68	78	570	253	117	129	650	485	206	44	32	57
MIN	31	38	23	50	53	48	83	213	45	18	17	24
AC-FT	2,760	3,150	8,700	5,890	3,960	5,700	14,330	21,580	5,650	1,940	1,350	1,860

CAL YR 1972 TOTAL 77,868 MEAN 213 MAX 1,520 MIN 23 AC-FT 154,400
WTR YR 1973 TOTAL 38,761 MEAN 106 MAX 570 MIN 17 AC-FT 76,880

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-20	2330	3.08	697	5-16	1100	2.85	545
4-28	0430	2.83	535				

10388000 ANA RIVER NEAR SUMMER LAKE, OREG.

LOCATION.--Lat 43°00'00", long 120°45'00", in SE¼ sec.6, T.30 S., R.17 E., Lake County, on left bank 300 ft (91 m) downstream from diversion dam and 2 mi (3.2 km) northeast of town of Summer Lake.

PERIOD OF RECORD.--October 1929 to September 1939 (river only); June to September 1928, April 1931 to July 1938, and April 1940 to September 1942 (irrigation season records for Summer Lake Canal only); June 1951 to current year. Prior to June 1951 monthly discharge only, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 4,160 ft (1,268 m) from plans of Ana River diversion dam. Oct. 1, 1929, to Sept. 30, 1939, at site 80 ft (24 m) downstream at different datum.

AVERAGE DISCHARGE.--25 years (1930-32, 1935-36, 1951-73), 92.7 ft³/s (2.625 m³/s), 67,160 acre-ft/yr (82.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 145 ft³/s (4.11 m³/s) Mar. 2; minimum, 30 ft³/s (0.85 m³/s) Apr. 24.
Period of record: Maximum discharge, 188 ft³/s (5.32 m³/s) Dec. 22, 1964, gage height, 2.81 ft (0.856 m), no flow in canal; minimum, 1.0 ft³/s (0.028 m³/s) Jan. 21, 22, 1970; minimum daily, 3.0 ft³/s (0.085 m³/s) Oct. 31, 1970.

REMARKS.--Records good. All records presented herein include flow in Summer Lake Canal which diverts 300 ft (91 m) above station for irrigation of lands along west side of Summer Lake. Flow regulated by gates at diversion dam. Source of stream is Ana River Springs, three-quarters of a mile above station, which are flooded over by pondage behind diversion dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	80	87	90	87	85	94	79	90	85	80	85
2	87	80	87	90	87	110	94	83	90	77	80	83
3	87	80	87	90	87	135	94	85	90	76	80	82
4	87	80	88	89	87	127	94	85	90	76	80	79
5	88	80	88	89	87	120	94	85	89	77	80	79
6	88	80	88	89	87	114	94	82	89	79	80	81
7	88	80	89	88	87	110	94	83	89	79	81	81
8	86	80	89	88	87	106	94	84	90	79	84	81
9	85	80	89	88	87	101	94	83	89	80	85	80
10	85	80	90	88	87	97	94	83	90	77	85	82
11	83	80	90	88	87	97	94	83	90	77	84	82
12	86	80	90	88	87	93	94	85	89	76	83	82
13	85	80	89	88	87	87	94	85	89	76	83	82
14	85	80	89	87	87	89	94	85	89	74	88	83
15	84	80	89	87	87	91	94	85	89	77	87	83
16	84	80	88	87	87	93	94	85	89	78	87	83
17	84	82	88	87	87	94	94	85	89	78	86	76
18	82	85	87	87	87	94	94	95	88	78	86	79
19	82	85	87	87	87	94	94	90	88	77	86	85
20	82	85	88	87	87	94	94	88	88	79	86	85
21	82	85	88	87	87	94	94	89	87	79	87	82
22	80	85	88	87	87	94	94	89	87	80	87	79
23	80	85	88	87	87	94	63	90	87	80	87	79
24	80	85	89	87	87	94	37	90	87	80	87	80
25	80	85	89	87	87	94	38	90	87	84	87	87
26	80	85	89	87	87	94	40	90	87	79	88	92
27	80	85	89	87	87	94	53	90	86	80	87	94
28	80	86	89	87	86	94	56	90	85	80	86	94
29	80	86	90	87	------	94	68	90	85	80	88	94
30	80	86	90	87	------	94	74	90	85	80	85	92
31	80	------	90	87	------	94	------	90	------	80	84	------
TOTAL	2,588	2,470	2,746	2,719	2,435	3,065	2,497	2,686	2,647	2,437	2,624	2,506
MEAN	83.5	82.3	88.6	87.7	87.0	98.9	83.2	86.6	88.2	78.6	84.6	83.5
MAX	88	86	90	90	87	135	94	95	90	85	88	94
MIN	80	80	87	87	86	85	37	79	85	74	80	76
AC-FT	5,130	4,900	5,450	5,390	4,830	6,080	4,950	5,330	5,250	4,830	5,200	4,970

CAL YR 1972 TOTAL 33,006 MEAN 90.2 MAX 104 MIN 76 AC-FT 65,470
WTR YR 1973 TOTAL 31,420 MEAN 86.1 MAX 135 MIN 37 AC-FT 62,320

10390000 SILVER CREEK NEAR SILVER LAKE, OREG.

LOCATION.--Lat 43°06'40", long 121°04'05", in SW¼ sec.28, T.28 S., R.14 E., Lake County, on right bank 1.5 mi (2.4 km) downstream from diversion dam of Silver Lake Irrigation District, 1.5 mi (2.4 km) southwest of town of Silver Lake, and 3 mi (5 km) upstream from Bridge Creek.

DRAINAGE AREA.--180 mi^2 (466 km^2), approximately.

PERIOD OF RECORD.--January 1905 to March 1907, January 1909 to September 1927, February to December 1928, February 1929 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 15, 1932. Datum of gage is 4,361.22 ft (1,329.300 m) above mean sea level. Prior to May 24, 1932, nonrecording gage or water-stage recorder at practically same location at datum 1.00 ft (0.305 m) higher, or nonrecording gage at diversion dam outlet 1.5 mi (2.4 km) upstream at different datum.

AVERAGE DISCHARGE.--61 years (1905-6, 1909-27, 1929-41, 1943-73), 29.4 ft^3/s (0.833 m^3/s), 21,300 acre-ft/yr (26.3 hm^3/yr), including diversion by Silver Lake Irrigation District Canal.

EXTREMES.--Current year: Maximum discharge, 63 ft^3/s (1.78 m^3/s) May 4, 26; minimum daily, 1.2 ft^3/s (0.034 m^3/s) Mar. 6.
Period of record: Maximum discharge, 1,800 ft^3/s (51.0 m^3/s) Mar. 20, 1907, gage height. 10.08 ft (3.072 m), present datum, from rating curve extended above 700 ft^3/s (19.8 m^3/s); maximum gage height, 10.3 ft (3.139 m) Dec. 22, 1964; no flow at times in 1931-32, 1934, 1937.

REMARKS.--Records good. Flow regulated by reservoir, capacity, 800 acre-ft (986,000 m^3), above diversion dam 1.5 mi (2.4 km) above station and by Thompson Valley Reservoir, capacity, 17,400 acre-ft (21.5 hm^3), 11 mi (18 km) above station. Records given herein include flow in Silver Lake Irrigation District Canal which has diverted 1.5 mi (2.4 km) above station 1923-43, 1966-73.

REVISIONS (WATER YEARS).--WSP 1564: 1906, 1910, 1921(M). WSP 1734: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	7.0	6.4	7.0	7.0	6.4	4.4	44	58	49	36	12
2	8.7	7.0	6.4	7.0	6.7	6.4	6.5	44	56	45	36	16
3	8.2	7.0	6.7	7.2	6.4	6.4	8.2	49	56	37	36	18
4	7.3	7.0	6.2	7.4	6.4	5.4	11	60	56	36	37	18
5	6.9	7.0	5.4	7.6	6.4	1.7	13	58	56	35	37	19
6	6.5	7.0	5.0	7.8	6.7	1.2	15	57	56	35	34	22
7	6.1	7.0	5.0	7.4	6.7	2.1	19	56	55	35	33	24
8	5.5	7.0	5.0	7.4	6.7	3.5	20	57	54	37	35	24
9	5.2	7.0	5.0	7.4	6.7	7.3	20	57	53	36	32	28
10	4.9	7.0	5.0	7.4	6.7	7.4	22	56	53	39	32	28
11	4.9	7.0	5.0	7.1	6.7	7.7	20	56	54	41	34	28
12	4.9	7.0	5.4	6.7	6.7	7.6	23	57	54	41	34	28
13	6.5	7.0	7.5	6.4	6.7	7.2	28	60	54	43	31	28
14	7.7	7.0	8.4	6.4	6.7	6.9	26	61	54	47	31	28
15	7.4	7.0	7.8	6.7	6.7	6.6	26	59	55	51	31	28
16	7.4	7.0	8.1	6.7	6.7	6.9	26	61	54	53	32	27
17	7.0	6.7	7.4	7.0	6.4	6.9	26	59	55	52	32	28
18	6.9	6.7	7.0	7.0	6.7	6.8	25	60	57	52	31	28
19	6.8	6.7	6.7	7.2	6.7	6.8	24	60	58	52	30	27
20	6.6	6.7	6.7	7.3	6.7	6.7	26	58	59	42	29	28
21	6.5	6.4	6.7	7.4	6.6	6.7	30	58	59	37	25	28
22	6.3	6.4	6.7	7.3	6.4	6.4	30	56	57	36	21	28
23	5.9	6.4	6.7	7.2	6.4	6.0	32	56	57	37	14	27
24	6.7	6.4	6.7	7.0	6.4	5.6	33	56	58	35	12	27
25	7.0	6.4	6.7	7.0	6.4	5.2	34	60	56	35	12	27
26	7.0	6.4	6.7	7.0	6.4	4.8	33	63	56	35	13	26
27	7.0	6.4	6.7	7.0	6.4	3.2	39	62	58	35	13	26
28	7.0	6.4	6.8	7.0	6.4	2.7	42	60	57	35	13	27
29	7.0	6.4	6.9	7.0	------	3.4	43	60	57	35	12	27
30	7.0	6.4	7.0	7.0	------	3.8	43	58	55	37	12	27
31	7.0	------	7.0	7.0	------	4.4	------	58	------	37	12	------
TOTAL	212.8	202.8	200.7	220.0	184.5	170.1	748.1	1.776	1.676	1.252	822	757
MEAN	6.86	6.76	6.47	7.10	6.59	5.49	24.9	57.3	55.9	40.4	26.5	25.2
MAX	13	7.0	8.4	7.8	7.0	7.7	43	63	59	53	37	28
MIN	4.9	6.4	5.0	6.4	6.4	1.2	4.4	44	53	35	12	12
AC-FT	422	402	398	436	366	337	1.480	3.520	3.320	2.480	1.630	1.500

CAL YR 1972 TOTAL 20.745.5 MEAN 56.7 MAX 397 MIN 4.9 AC-FT 41.150
WTR YR 1973 TOTAL 8.222.0 MEAN 22.5 MAX 63 MIN 1.2 AC-FT 16.310

10393500 SILVIES RIVER NEAR BURNS, OREG.

LOCATION.--Lat 43°42'55", long 119°10'35", in NW¼NW¼ sec.31, T.21 S., R.30 E., Harney County, on left bank 5 mi (8 km) downstream from Emigrant Creek and 11 mi (18 km) northwest of Burns.

DRAINAGE AREA.--934 mi² (2,419 km²).

PERIOD OF RECORD.--May 1903 to July 1906, December 1908 to December 1912, March 1913 to September 1917 (irrigation seasons only), March 1918 to October 1920, March 1921 to July 1922 (irrigation seasons only), October 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,195 ft (1,279 m) above mean sea level (river-profile survey). See WSP 1734 for history of changes prior to Oct. 4, 1951.

AVERAGE DISCHARGE.--60 years (1903-5, 1909-12, 1917-21, 1922-73), 163 ft³/s (4.616 m³/s), 118,100 acre-ft/yr (146 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 748 ft³/s (21.2 m³/s) Jan. 16, gage height, 6.75 ft (2.057 m); minimum, 2.6 ft³/s (0.074 m³/s) Aug. 18.

Period of record: Maximum discharge, 4,960 ft³/s (140 m³/s) Apr. 6, 1952, gage height, 15.2 ft (4.63 m); no flow July 19 to Sept. 22, 1934.

REMARKS.--Records good except those for winter periods, which are fair. No regulation. Diversions for irrigation above station during periods of high flow only.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	24	33	85	64	332	110	159	82	10	3.6	4.5
2	17	27	35	85	60	335	104	130	67	10	3.6	4.5
3	17	26	29	80	56	200	109	147	61	10	3.6	4.8
4	17	28	22	78	52	180	115	163	59	9.6	3.9	5.1
5	17	31	13	55	49	178	132	193	56	8.8	4.2	4.8
6	17	30	12	45	48	155	152	211	51	8.4	4.8	4.5
7	17	29	12	40	50	136	153	200	45	8.0	4.5	4.5
8	17	31	12	38	56	122	158	192	42	7.6	3.9	4.8
9	18	32	12	45	58	126	170	191	35	7.2	3.9	4.8
10	19	32	12	50	61	127	172	174	33	6.8	4.2	5.1
11	20	35	12	65	64	126	201	163	32	6.4	4.2	5.1
12	21	35	12	90	68	112	225	148	31	6.0	4.2	4.8
13	23	33	13	120	70	107	259	139	31	6.0	4.2	4.8
14	21	40	15	289	73	98	277	127	29	5.7	3.9	4.8
15	21	40	24	307	76	96	269	119	25	5.4	3.9	4.8
16	30	34	35	548	78	96	264	114	23	5.4	3.6	4.8
17	26	33	63	554	80	98	248	108	23	5.1	3.0	5.1
18	24	34	76	370	90	93	225	103	23	5.1	2.8	5.1
19	23	35	89	283	76	94	214	93	22	5.1	3.0	5.4
20	22	32	111	248	70	96	201	83	21	5.4	3.0	6.0
21	22	27	147	200	66	103	186	78	20	5.4	3.0	6.8
22	21	25	168	160	62	105	176	77	17	5.4	3.3	7.2
23	21	26	155	120	58	104	178	74	16	5.4	3.3	7.2
24	21	22	150	100	65	105	180	86	15	5.1	3.3	8.0
25	21	28	146	80	150	109	182	119	15	5.1	4.5	8.4
26	21	35	133	65	221	120	187	109	14	4.5	6.0	8.8
27	22	33	120	58	225	127	197	92	14	3.9	6.8	8.4
28	21	34	107	54	310	132	194	95	12	3.6	6.0	7.6
29	21	40	102	60	------	124	183	87	11	3.6	5.1	7.2
30	21	31	95	62	------	124	173	76	10	3.6	4.8	6.8
31	17	------	95	64	------	121	------	76	------	3.6	4.8	------
TOTAL	633	942	2,060	4,498	2,446	4,181	5,594	3,926	935	191.2	126.9	174.5
MEAN	20.4	31.4	66.5	145	87.4	135	186	127	31.2	6.17	4.09	5.82
MAX	30	40	168	554	310	335	277	211	82	10	6.8	8.8
MIN	17	22	12	38	48	93	104	74	10	3.6	2.8	4.5
AC-FT	1,260	1,870	4,090	8,920	4,850	8,290	11,100	7,790	1,850	379	252	346

CAL YR 1972 TOTAL 82,076.0 MEAN 224 MAX 1,800 MIN 11 AC-FT 162,800
WTR YR 1973 TOTAL 25,707.6 MEAN 70.4 MAX 554 MIN 2.8 AC-FT 50,990

10395000 EAST FORK SILVIES RIVER NEAR LAWEN, OREG.

LOCATION.--Lat 43°25'35", long 118°48'05", in SW¼ sec.5, T.24 S., R.32 E., Harney County, on left bank downstream side of road bridge, 1.6 mi (2.6 km) south of Lawen, and 15.2 mi (24.5 km) southeast of Burns.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March to June 1916, March 1972 to current year.

GAGE.--Water-stage recorder and deflection-meter recorder. Altitude of gage is 4,090 ft (1,250 m) from topographic map. Mar. 31 to June 15, 1916, nonrecording gage.

EXTREMES.--March to September 1972: Maximum daily discharge, 114 ft^3/s (3.23 m^3/s) Mar. 24-27; no flow July 17 to Sept. 30.
Water year 1973: Maximum daily discharge, 10 ft^3/s (0.283 m^3/s) Feb. 9-13; no flow Oct. 1 to Dec. 21, Jan. 7-14, Apr. 22 to Sept. 30.
Period of record: Maximum discharge observed, 272 ft^3/s (7.70 m^3/s) Apr. 21, 1916, gage height, 2.30 ft (0.701 m); no flow for long periods each year.

REMARKS.--Records fair. West Fork (see station 10395500) and East Fork Silvies River are distributaries that originate at bifurcation of Silvies River 20 mi (32 km) upstream. Diversions primarily by flooding for irrigation of many thousand acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						30	109	31	15	2.0		
2						37	99	30	15	2.0		
3						43	98	29	14	1.5		
4						48	83	28	14	1.5		
5						51	83	27	14	1.0		
6						58	91	28	13	1.0		
7						62	106	26	12	.50		
8						67	99	21	12	.50		
9						67	107	19	11	.50		
10						69	100	19	11	.50		
11						71	101	19	10	.50		
12						73	110	19	10	.50		
13						78	109	19	9.9	.40		
14						78	108	19	9.2	.30		
15						83	101	19	8.5	.20		
16						87	107	19	7.9	.10		
17						90	99	20	7.3	0		
18						102	90	22	6.9	0		
19						104	82	23	6.4	0		
20						109	78	23	6.1	0		
21						109	74	23	5.5	0		
22						111	64	24	5.4	0		
23						111	59	22	5.1	0		
24						114	58	21	4.7	0		
25						114	54	20	4.5	0		
26						114	47	19	4.4	0		
27						114	41	18	4.2	0		
28						109	38	17	3.2	0		
29						109	35	16	2.9	0		
30					------	107	32	16	2.7	0		
31		------			------	109	------	15	------	0		------
TOTAL						2,628	2,462	671	255.8	13.00	0	0
MEAN						84.8	82.1	21.6	8.53	.42	0	0
MAX						114	110	31	15	2.0	0	0
MIN						30	32	15	2.7	0	0	0
AC-FT						5,210	4,880	1,330	507	26	0	0

10395000 EAST FORK SILVIES RIVER NEAR LAWEN, OREG.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.20	6.0	5.4	.64					
2			0	.10	6.2	5.2	.42					
3			0	.08	6.4	5.2	.24					
4			0	.06	6.6	5.4	.11					
5			0	.04	7.0	5.6	.10					
6			0	.02	7.5	5.4	.10					
7			0	0	8.0	5.2	.08					
8			0	0	9.0	5.2	.08					
9			0	0	10	5.4	.08					
10			0	0	10	5.4	.07					
11			0	0	10	5.2	.06					
12			0	0	10	4.4	.06					
13			0	0	10	3.8	.08					
14			0	0	9.0	3.2	.08					
15			0	.02	9.0	2.7	.07					
16			0	.08	9.0	2.7	.07					
17			0	1.0	9.0	2.2	.06					
18			0	2.0	9.0	2.2	.06					
19			0	3.2	8.0	2.2	.06					
20			0	4.2	8.0	1.9	.05					
21			0	5.0	8.0	1.7	.02					
22			.10	5.0	8.0	1.5	0					
23			.20	5.0	8.0	1.4	0					
24			.40	5.4	8.0	1.3	0					
25			.30	5.8	7.5	1.2	0					
26			.30	6.0	6.6	1.1	0					
27			.30	6.0	5.8	1.1	0					
28			.20	6.0	5.6	.99	0					
29			.20	6.0	------	.92	0					
30			.20	6.0	------	.90	0					
31		------	.20	6.0	------	.78	------		------			------
TOTAL	0	0	2.40	73.20	225.2	96.79	2.59	0	0	0	0	0
MEAN	0	0	.077	2.36	8.04	3.12	.086	0	0	0	0	0
MAX	0	0	.40	6.0	10	5.6	.64	0	0	0	0	0
MIN	0	0	0	0	5.6	.78	0	0	0	0	0	0
AC-FT	0	0	4.8	145	447	192	5.1	0	0	0	0	0

WTR YR 1973 TOTAL 400.18 MEAN 1.10 MAX 10 MIN 0 AC-FT 794

10395500 WEST FORK SILVIES RIVER NEAR LAWEN, OREG.

LOCATION.--Lat 43°23'00", long 118°50'03", in SE¼SW¼ sec.24, T.25 S., R.32 E., Harney County, near right bank on upstream side of bridge on county road, 4.9 mi (7.9 km) southwest of Lawen.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March to July 1916, April to July 1917, April to June 1919, April to June 1922, March 1972 to current year.

GAGE.--Water-stage recorder and deflection-meter recorder. Altitude of gage is 4,090 ft (1,250 m), from topographic map. Prior to Mar. 4, 1972, nonrecording gage at same site at different datum.

EXTREMES.--March to September 1972: Maximum daily discharge, 323 ft^3/s (9.15 m^3/s) Mar. 24; maximum gage height, 5.72 ft (1.743 m) Apr. 5; no flow May 1 to Sept. 30.

Water year 1973: Maximum daily discharge, 1.5 ft^3/s (0.042 m^3/s) Feb. 10 to Mar. 13; no flow Oct. 1 to Jan. 11.

Period of record: Maximum discharge, 1,250 ft^3/s (35.4 m^3/s) Apr. 16-18, 1916, May 18-20, 1917, gage height, 9.7 ft (2.96 m), datum then in use; no flow for long periods each year.

REMARKS.--Records poor. East Fork (see station 10395000) and West Fork Silvies River are distributaries that originate at bifurcation of Silvies River 20 mi (32 km) upstream. Diversions primarily by flooding for irrigation of many thousand acres above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						10	284					
2						12	274					
3						14	281					
4						23	281					
5						40	268					
6						55	253					
7						68	248					
8						92	220					
9						108	206					
10						141	206					
11						171	196					
12						179	185					
13						179	195					
14						186	208					
15						194	210					
16						209	219					
17						224	240					
18						232	233					
19						247	202					
20						262	160					
21						285	160					
22						300	153					
23						300	136					
24						323	122					
25						308	78					
26						308	32					
27						308	22					
28						308	16					
29						300	9.0					
30					------	293	3.0					
31		------			------	285	------		------			------
TOTAL						5,964	5,300.0	0	0	0	0	0
MEAN						192	177	0	0	0	0	0
MAX						323	284	0	0	0	0	0
MIN						10	3.0	0	0	0	0	0
AC-FT						11,830	10,510	0	0	0	0	0

10395500 WEST FORK SILVIES RIVER NEAR LAWEN, OREG.--(Continued)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.50	1.5	.20					
2				0	.50	1.5	.20					
3				0	.50	1.5	.20					
4				0	.50	1.5	0					
5				0	1.0	1.5	0					
6				0	1.0	1.5	0					
7				0	1.0	1.5	0					
8				0	1.0	1.5	0					
9				0	1.0	1.5	0					
10				0	1.5	1.5	0					
11				0	1.5	1.5	0					
12				.50	1.5	1.5	0					
13				.50	1.5	1.5	0					
14				.50	1.5	1.0	0					
15				.50	1.5	1.0	0					
16				.50	1.5	1.0	0					
17				.50	1.5	1.0	0					
18				.50	1.5	.80	0					
19				.50	1.5	.80	0					
20				.50	1.5	.80	0					
21				.50	1.5	.80	0					
22				.50	1.5	.80	0					
23				.50	1.5	.80	0					
24				.50	1.5	.80	0					
25				.50	1.5	.80	0					
26				.50	1.5	.50	0					
27				.50	1.5	.50	0					
28				.50	1.5	.50	0					
29				.50	------	.20	0					
30				.50	------	.20	0					
31		------		.50	------	.20	------		------			------
TOTAL	0	0	0	10.00	35.50	32.00	.60	0	0	0	0	0
MEAN	0	0	0	.32	1.27	1.03	.020	0	0	0	0	0
MAX	0	0	0	.50	1.5	1.5	.20	0	0	0	0	0
MIN	0	0	0	0	.50	.20	0	0	0	0	0	0
AC-FT	0	0	0	20	70	63	1.2	0	0	0	0	0

WTR YR 1973 TOTAL 78.10 MEAN .21 MAX 1.5 MIN 0 AC-FT 155

10396000 DONNER UND BLITZEN RIVER NEAR FRENCHGLEN, OREG.

LOCATION.--Lat 42°47'28", long 118°52'00", in NW¼NW¼ sec.20, T.32 S., R.32½ E., Harney County, Bureau of Land Management land, on left bank 1.5 mi (2.4 km) upstream from upper diversions for Malheur Migratory Waterfowl Refuge, 2.0 mi (3.2 km) downstream from Fish Creek, and 3.5 mi (5.6 km) southeast of Frenchglen.

DRAINAGE AREA.--200 mi^2 (518 km^2), approximately.

PERIOD OF RECORD.--March 1911 to September 1913, March 1914 to September 1916, April 1917 to September 1921, August to November 1929, April to September 1930, December 1937 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "near Diamond" 1911-21. Records of discharge for January 1909 to September 1910 (published in WSP 270, 290, and 370, for a nonequivalent site as "near Diamond") have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,254 ft (1,297 m) above mean sea level (levels by Fish and Wildlife Service). Prior to December 1937, nonrecording gage at several sites within 2 mi (3 km) downstream at different datums. Dec. 6, 1937, to Feb. 14, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years (1911-13, 1914-16, 1917-21, 1938-73), 119 ft^3/s (3.37 m^3/s), 86,220 acre-ft/yr (106 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 698 ft^3/s (19.8 m^3/s) May 19, gage height, 3.88 ft (1.183 m); minimum, 4.2 ft^3/s (0.12 m^3/s) Dec. 9, result of freezeup.

Period of record: Maximum discharge, 2,830 ft^3/s (80.1 m^3/s) Feb. 28, 1972, gage height, 6.36 ft (1.939 m); minimum, 4.2 ft^3/s (0.12 m^3/s) Dec. 9, 1972, result of freezeup.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 330: Drainage area (former site). WSP 860: Drainage area (present site). WSP 1564: 1938-39(M), 1942-43(M), 1948(M), 1951(P), 1952-53. WSP 1714: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	48	45	33	46	71	82	200	249	72	35	34
2	46	45	47	44	42	53	86	203	210	65	37	34
3	44	45	46	48	46	50	100	210	188	63	38	34
4	44	60	37	33	44	52	120	213	177	61	39	33
5	44	52	20	36	46	55	140	197	176	61	34	33
6	43	44	17	43	46	56	120	197	192	59	34	32
7	43	46	15	37	46	52	110	210	219	57	34	33
8	43	49	13	40	46	60	110	230	225	54	34	34
9	44	44	11	50	46	62	130	236	212	52	34	34
10	47	49	13	70	47	60	120	243	199	50	34	33
11	45	46	25	100	46	62	125	253	155	46	34	33
12	45	46	30	165	47	60	120	299	152	45	33	33
13	44	44	60	344	46	52	110	381	158	45	32	32
14	45	47	40	236	46	48	110	455	134	45	32	32
15	48	46	31	194	50	60	105	470	113	45	32	33
16	46	46	71	367	49	70	100	485	103	43	32	33
17	45	45	92	124	53	74	94	525	104	42	32	33
18	45	44	99	72	50	70	90	565	100	42	32	33
19	44	46	144	54	42	76	96	612	94	43	32	34
20	45	44	123	46	47	80	104	545	93	56	32	41
21	45	36	106	59	46	70	98	401	101	49	32	38
22	44	38	133	36	46	68	106	356	108	46	32	35
23	44	40	78	45	47	80	141	342	98	43	32	36
24	42	37	66	58	55	86	167	481	90	42	33	44
25	42	45	57	49	58	92	185	449	93	41	35	50
26	43	48	53	43	53	100	223	302	105	39	35	40
27	40	51	55	25	58	90	281	249	102	39	37	36
28	44	51	50	40	62	80	285	245	91	38	35	36
29	42	48	49	52	------	74	243	257	88	37	34	36
30	38	41	56	53	------	78	213	274	80	37	33	35
31	53	------	48	47	------	78	------	286	------	35	33	------
TOTAL	1,373	1,371	1,730	2,643	1,356	2,119	4,114	10,371	4,209	1,492	1,047	1,057
MEAN	44.3	45.7	55.8	85.3	48.4	68.4	137	335	140	48.1	33.8	35.2
MAX	53	60	144	367	62	100	285	612	249	72	39	50
MIN	38	36	11	25	42	48	82	197	80	35	32	32
AC-FT	2,720	2,720	3,430	5,240	2,690	4,200	8,160	20,570	8,350	2,960	2,080	2,100

CAL YR 1972 TOTAL 52,867 MEAN 144 MAX 1,680 MIN 11 AC-FT 104,900
WTR YR 1973 TOTAL 32,882 MEAN 90.1 MAX 612 MIN 11 AC-FT 65,220

PEAK DISCHARGE (BASE, 650 CFS).--May 19 (2330) 698 cfs (3.88 ft).

NOTE.--No gage-height record Mar. 8 to Apr. 18.

10401500 DONNER UND BLITZEN RIVER NEAR VOLTAGE, OREG.

LOCATION.--Lat 43°15'05", 118°50'42", in SW¼ sec.2, T.27 S., R.31 E., Harney County, in Malheur National Wildlife Refuge on right bank just downstream from Sodhouse diversion dam, 1.2 mi (1.9 km) southwest of refuge headquarters, and 2.8 mi (4.5 km) southwest of Voltage.

DRAINAGE AREA.--760 mi² (1,970 km²), approximately.

PERIOD OF RECORD.--February 1938 to September 1946, March 1972 to current year. Records for April 1916 to June 1919, published in WSP 440, 480, and 510, and March 1921 to June 1922, published in WSP 530 and 550, at site 1.5 mi (2.4 km) downstream, including diversions and overflow through 16 culverts crossing Sodhouse Lane, have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,096.58 ft (1,248.638 m) above mean sea level (levels by Fish and Wildlife Service). Prior to June 16, 1939, nonrecording gage at site 30 ft (9 m) downstream, and Mar. 2 to Sept. 30, 1972, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--6 years (1938-43, 1972-73), 89.0 ft³/s (2.52 m³/s), 64,480 acre-ft/yr (79.5 hm³/yr).

EXTREMES.--March to September 1972: Maximum discharge, 653 ft³/s (18.5 m³/s) Mar. 5, gage height, 5.30 ft (1.615 m), datum then in use; minimum daily, 7.8 ft³/s (0.22 m³/s) May 2, but may have been less during periods of no gage-height record.

Water year 1973: Maximum discharge, 394 ft³/s (11.2 m³/s) Jan. 15; maximum gage height, 5.78 ft (1.762 m) Jan. 15 (backwater from ice); minimum discharge, 9.1 ft³/s (0.26 m³/s) July 31.

Period of record: Maximum discharge, 653 ft³/s (18.5 m³/s) Mar. 5, 1972, gage height, 6.30 ft (1.920 m), present datum; maximum gage height, 7.26 ft (2.212 m) Jan. 30, 1942, present datum; little or no flow at times June to August 1918 at site 1.5 mi (2.4 km) downstream.

REMARKS.--Records fair. Some regulation by diversion dams. Many diversions above station for irrigation of lands above and below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						550	128	10	219	12	31	43
2						589	125	7.8	245	13	32	40
3						624	148	8.0	234	13	31	38
4						631	167	9.0	235	12	61	36
5						637	170	10	229	11	45	34
6						613	223	11	252	11	30	29
7						427	196	12	276	7.1	23	30
8						321	141	13	271	8.0	16	30
9						294	141	12	279	10	48	32
10						312	117	11	276	63	50	34
11						340	93	10	275	92	50	36
12						337	85	9.6	267	147	48	38
13						348	64	15	203	187	47	42
14						383	60	25	199	170	46	42
15						396	56	30	132	149	40	45
16						387	52	35	152	145	35	45
17						373	48	40	158	137	38	45
18						407	43	60	153	101	41	45
19						456	38	83	154	88	40	52
20						425	32	95	141	94	39	46
21						387	30	97	48	105	38	47
22						377	28	114	42	109	44	48
23						355	26	154	42	101	46	45
24						329	24	159	42	96	44	45
25						306	22	155	42	83	44	43
26						282	20	134	42	77	42	51
27						263	18	140	39	78	41	47
28						231	16	139	14	75	40	57
29						202	14	142	12	60	38	72
30					------	185	12	185	11	40	39	54
31		------			------	194	------	209	------	22	41	------
TOTAL						11,961	2,337	2,134.4	4,684	2,316.1	1,248	1,291
MEAN						386	77.9	68.9	156	74.7	40.3	43.0
MAX						637	223	209	279	187	61	72
MIN						185	12	7.8	11	7.1	16	29
AC-FT						23,720	4,640	4,230	9,290	4,590	2,480	2,560

10401500 DONNER UND BLITZEN RIVER NEAR VOLTAGE, OREG.--(Continued)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	57	83	68	70	53	23	18	27	13	11	12
2	50	69	83	66	76	53	22	16	28	13	13	12
3	80	67	91	64	84	54	21	15	25	12	15	12
4	55	55	77	60	93	40	21	16	25	12	26	11
5	51	93	64	58	96	38	20	19	23	12	25	12
6	49	85	58	60	92	37	20	21	18	12	22	12
7	48	84	38	64	96	33	20	20	18	11	21	13
8	47	89	30	70	93	32	19	21	15	11	24	13
9	48	93	25	80	93	34	18	24	17	11	26	13
10	50	87	50	90	88	32	19	25	15	11	22	13
11	53	85	80	102	77	41	19	27	13	10	16	13
12	56	81	100	130	70	57	11	29	12	12	21	13
13	57	76	110	170	69	59	14	34	12	12	19	13
14	54	75	80	280	67	57	17	65	11	12	16	13
15	54	84	70	340	67	67	17	75	11	11	14	13
16	57	84	150	270	68	46	15	110	11	11	14	13
17	58	80	190	310	73	44	15	117	11	10	14	13
18	56	72	220	265	72	46	17	120	11	10	14	13
19	56	72	240	150	72	40	18	122	11	23	13	13
20	55	71	210	85	51		19	161	11	27	13	13
21	59	74	230	72	26	30	17	145	11	9.4	13	50
22	60	70	200	76	30	30	15	136	11	11	12	17
23	56	60	160	86	35	87	15	74	11	13	12	23
24	54	70	130	98	45	52	15	40	11	20	12	35
25	53	86	110	92	62	35	17	109	11	19	12	36
26	51	89	100	82	62	28	18	134	11	19	11	42
27	52	89	94	70	56	26	20	54	12	25	13	50
28	53	94	86	72	53	25	26	34	11	23	13	52
29	59	87	80	76	------	24	27	28	11	21	12	49
30	58	93	78	78	------	23	24	18	12	18	12	45
31	58	------	72	76	------	23	------	23	------	11	12	------
TOTAL	1,697	2,371	3,389	3,660	1,936	1,280	559	1,850	437	445.4	493	652
MEAN	54.7	79.0	109	118	69.1	41.3	18.6	59.7	14.6	14.4	15.9	21.7
MAX	80	94	240	340	96	87	27	161	28	27	26	52
MIN	47	55	25	58	26	23	11	15	11	9.4	11	11
AC-FT	3,370	4,700	6,720	7,260	3,840	2,540	1,110	3,670	867	883	978	1,290

WTR YR 1973 TOTAL 18,769.4 MEAN 51.4 MAX 340 MIN 9.4 AC-FT 37,230

10402000 MALHEUR LAKE OUTLET AT NARROWS, OREG.

LOCATION.--Lat 43°16'55", long 118°57'50", in SE¼ sec.26, T.26 S., R.31 E., Harney County, on highway bridge at The Narrows.

DRAINAGE AREA.--2,150 mi^2 (5,570 km^2), approximately.

PERIOD OF RECORD.--May 1903 to July 1906, September 1909, March to September 1911, April to June 1912, April to August 1913, June 1914, gage heights only. March to July 1916, March 1972 to current year.

GAGE.--Water-stage recorder and deflection-meter recorder. Datum of gage is 4,089.36 ft (1,246.437 m) above mean sea level. Prior to March 1972 nonrecording gage at same site at datum 0.50 ft (0.152 m) lower.

EXTREMES.--March to September 1972: Maximum daily discharge, 242 ft^3/s (6.85 m^3/s) Apr. 23; maximum gage height, 4.36 ft (1.329 m) June 13 (backwater from Mud Lake); no flow Aug. 9 to Sept. 30.

Water year 1973: Maximum daily discharge, 30 ft^3/s (0.850 m^3/s) Mar. 14, 15; maximum gage height, 3.43 ft (1.045 m) Apr. 5 (backwater from Mud Lake); no flow Oct. 1 to Jan. 17, June 27 to Sept. 30.

Period of record: Maximum daily discharge, 242 ft^3/s (6.85 m^3/s) Apr. 23, 1972; no flow for long periods each year.

Maximum stage observed, 6.4 ft (1.95 m) May 12-16, 1904 (datum then in use, discharge not determined). A discharge of 841 ft^3/s (23.8 m^3/s) was measured May 5, 1943, gage height, 6.16 ft (1.878 m).

REMARKS.--Records poor. Natural storage in Malheur Lake. Diversions for irrigation of thousands of acres above station. Outflow from Malheur Lake flows into Mud Lake and Mud Lake when full spills over a sand reef, or is drained, into Harney Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						95	184	233	162	46	10	
2						95	187	231	155	36	9.7	
3						97	193	231	153	34	9.2	
4						100	202	226	157	26	8.2	
5						105	204	227	116	22	7.2	
6						107	191	227	71	21	6.8	
7						105	179	215	54	16	5.0	
8						106	184	206	46	13	3.7	
9						110	186	208	42	18	0	
10						114	200	207	34	13	0	
11						116	212	204	34	8.9	0	
12						119	206	206	34	13	0	
13						122	198	206	42	38	0	
14						122	206	200	115	52	0	
15						124	216	198	137	56	0	
16						127	221	185	136	52	0	
17						130	221	176	132	49	0	
18						132	223	184	129	41	0	
19						134	230	183	122	42	0	
20						136	232	171	110	36	0	
21						139	224	171	107	34	0	
22						140	240	172	103	33	0	
23						142	242	172	101	29	0	
24						143	221	175	96	23	0	
25						144	224	174	96	22	0	
26						146	236	174	92	20	0	
27						148	239	172	90	20	0	
28						150	224	177	84	18	0	
29						160	221	171	78	17	0	
30					------	165	233	166	61	14	0	
31		------			------	176	------	165	------	14	0	------
TOTAL						3,949	6,379	6,013	2,889	876.9	59.8	0
MEAN						127	213	194	96.3	28.3	1.93	0
MAX						176	242	233	162	56	10	0
MIN						95	179	165	34	8.9	0	0
AC-FT						7,830	12,650	11,930	5,730	1,740	119	0

10402000 MALHEUR LAKE OUTLET AT NARROWS, OREG.—(Continued)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	6.0	19	11	5.9	9.3			
2				0	6.0	19	11	5.8	9.3			
3				0	6.0	20	10	5.8	9.2			
4				0	6.0	21	10	5.8	8.0			
5				0	6.0	22	10	11	5.8			
6				0	6.0	23	10	11	5.8			
7				0	6.0	24	11	12	8.0			
8				0	6.0	25	10	13	9.0			
9				0	6.0	26	10	14	9.0			
10				0	6.0	27	10	15	9.0			
11				0	8.0	27	10	14	8.9			
12				0	10	28	13	12	8.9			
13				0	11	29	13	11	8.8			
14				0	12	30	13	10	7.6			
15				0	14	30	10	10	6.5			
16				0	14	29	10	11	6.4			
17				0	14	29	10	9.0	6.0			
18				1.0	15	27	10	7.8	5.5			
19				1.0	15	25	15	7.8	5.0			
20				2.0	15	23	15	8.9	4.5			
21				2.0	15	16	8.9	7.8	4.0			
22				2.0	15	15	8.9	6.7	3.0			
23				2.0	16	14	8.8	7.8	2.0			
24				2.0	17	13	10	7.8	1.5			
25				2.0	18	12	8.9	10	1.0			
26				4.0	18	13	8.5	9.0	.50			
27				4.0	18	14	8.0	9.0	0			
28				4.0	18	15	7.0	9.0	0			
29				4.0	------	12	6.5	11	0			
30				4.0	------	12	6.0	9.1	0			
31		------		6.0	------	13	------	7.0	------			------
TOTAL	0	0	0	40.0	323.0	652	303.5	295.0	162.50	0	0	0
MEAN	0	0	0	1.29	11.5	21.0	10.1	9.52	5.42	0	0	0
MAX	0	0	0	6.0	18	30	15	15	9.3	0	0	0
MIN	0	0	0	0	6.0	12	6.0	5.8	0	0	0	0
AC-FT	0	0	0	79	641	1,290	602	585	322	0	0	0

WTR YR 1973 TOTAL 1,776.00 MEAN 4.87 MAX 30 MIN 0 AC-FT 3,520

10403000 SILVER CREEK NEAR RILEY, OREG.

LOCATION.—Lat 43°41'30", long 119°39'30", in E½ sec.1, T.22 S., R.25 E., Harney County, on right bank 0.4 mi (0.6 km) downstream from Rough Creek, 1.4 mi (2.3 km) upstream from Nicoll Creek, and 14 mi (23 km) northwest of Riley.

DRAINAGE AREA.—228 mi² (591 km²).

PERIOD OF RECORD.—June 1951 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 4,450 ft (1,360 m), by barometer.

AVERAGE DISCHARGE.—22 years, 41.4 ft³/s (1.17 m³/s), 29,990 acre-ft/yr (37.0 hm³/yr).

EXTREMES.—Current year: Maximum discharge, 131 ft³/s (3.71 m³/s) Apr. 13, gage height, 2.71 ft (0.826 m); minimum, 0.20 ft³/s (0.006 m³/s) Aug. 19, 20.
Period of record: Maximum discharge, 1,810 ft³/s (51.3 m³/s) Dec. 22, 1964, gage height, 7.49 ft (2.283 m); no flow at times.

REMARKS.—Records good except those for winter periods, which are poor. No regulation. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	4.3	5.2	8.2	7.6	32	35	40	14	3.0	.53	.67
2	2.7	4.6	5.0	10	7.6	18	31	38	13	2.9	.45	.67
3	2.8	4.6	5.4	8.4	8.0	16	33	39	12	2.8	.52	.72
4	2.7	5.2	4.3	7.0	8.4	15	40	45	11	2.6	.54	.77
5	2.7	5.4	2.4	7.0	8.9	15	57	55	10	2.5	.56	.77
6	2.7	4.8	1.7	7.2	8.6	15	74	64	9.3	2.4	.52	.72
7	2.6	4.6	1.4	5.0	9.0	15	74	54	9.3	2.4	.48	.77
8	2.9	5.2	1.2	6.8	8.4	16	78	55	8.2	2.2	.47	.77
9	2.9	5.0	1.0	10	8.0	16	90	51	7.8	2.1	.46	.95
10	2.9	5.0	1.2	14	8.6	17	92	46	7.8	1.9	.44	.89
11	3.9	5.4	1.4	25	8.2	16	110	42	7.5	1.8	.41	.89
12	4.3	5.2	1.	35	8.2	15	120	39	7.5	1.7	.41	.83
13	3.8	4.8	1.8	40	8.4	16	120	35	7.5	1.6	.41	.77
14	4.1	5.2	1.8	37	8.6	13	110	32	7.1	1.6	.37	.77
15	4.1	5.2	2.3	30	8.4	13	97	29	7.1	1.4	.33	.77
16	3.8	5.4	2.1	38	8.0	15	92	35	7.1	1.3	.29	.89
17	3.5	5.4	3.5	35	8.6	15	89	29	6.8	1.3	.26	.95
18	3.0	5.4	11	17	8.0	14	79	26	6.8	1.2	.26	.95
19	2.5	5.0	12	12	8.0	15	75	24	6.8	1.3	.29	1.1
20	2.5	4.6	11	10	8.2	17	68	22	6.2	1.4	.26	1.2
21	2.8	4.1	15	9.0	8.6	21	63	21	5.7	1.4	.26	1.5
22	3.3	3.8	14	8.0	8.9	21	61	20	5.2	1.4	.26	1.5
23	3.3	3.5	12	10	8.8	18	62	19	5.0	1.3	.29	1.6
24	3.2	3.7	11	9.0	8.9	23	59	20	5.0	1.2	.37	2.0
25	3.0	4.3	13	7.5	19	34	59	32	5.0	1.2	.77	2.3
26	3.2	5.4	12	6.0	21	41	58	24	4.8	1.0	1.5	2.0
27	3.0	5.0	12	5.4	20	46	58	19	4.1	.83	1.3	1.7
28	3.0	6.2	10	6.4	32	42	54	17	3.3	.77	1.1	1.6
29	3.2	6.2	10	7.0	------	37	49	15	3.3	.72	.95	1.6
30	3.8	4.3	9.8	7.2	------	39	45	14	3.0	.57	.77	1.6
31	3.2	------	9.2	7.6	------	39	------	15	------	.53	.72	------
TOTAL	98.2	146.8	205.4	445.7	292.9	685	2.132	1.016	217.2	50.32	16.55	34.22
MEAN	3.17	4.89	6.63	14.4	10.5	22.1	71.1	32.8	7.24	1.62	.53	1.14
MAX	4.3	6.2	15	40	32	46	120	64	14	3.0	1.5	2.3
MIN	2.5	3.5	1.0	5.0	7.6	13	31	14	3.0	.53	.26	.67
AC-FT	195	291	407	884	581	1.360	4.230	2.020	431	100	33	68

CAL YR 1972 TOTAL 21.428.70 MEAN 58.5 MAX 980 MIN 1.0 AC-FT 42.500
WTR YR 1973 TOTAL 5.340.29 MEAN 14.6 MAX 120 MIN .26 AC-FT 10.590

PEAK DISCHARGE (BASE, 350 CFS).--No peak above base.

10406500 TROUT CREEK NEAR DENIO, NEV.

LOCATION.--Lat 42°09'20", long 118°27'30", in SW¼ sec.26, T.39 S., R.36 E., Harney County, on right bank 0.4 mi (0.6 km) upstream from bridge at mouth of canyon, 5 mi (8 km) east of Trout Creek Ranch, and 14 mi (23 km) northeast of Denio.

DRAINAGE AREA.--88 mi^2 (228 km^2), approximately.

PERIOD OF RECORD.--March 1911 to March 1912, April 1922 to November 1923, March 1925 to September 1931 (irrigation seasons only), April 1932 to current year. Prior to Oct. 1, 1961, published as "near Denio, Oreg."

GAGE.--Water-stage recorder. Datum of gage is 4,351.52 ft (1,326.343 m) above mean sea level. Mar. 25, 1911, to Mar. 31, 1912, nonrecording gage at bridge 0.4 mi (0.6 km) downstream at different datum. Apr. 28, 1922, to June 14, 1932, water-stage recorder at site 10 ft (3 m) upstream at datum 0.50 ft (0.152 m) higher.

AVERAGE DISCHARGE.--42 years (1922-23, 1932-73), 15.2 ft^3/s (0.430 m^3/s), 11,010 acre-ft/yr (13.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 180 ft^3/s (5.10 m^3/s) May 16, gage height, 3.70 ft (1.128 m); minimum, 3.3 ft^3/s (0.093 m^3/s) Aug. 18, 19, but may have been less during period of ice effect.

Period of record: Maximum discharge, 470 ft^3/s (13.3 m^3/s) Aug. 1, 1933, gage height, 5.26 ft (1.603 m), from rating curve extended above 230 ft^3/s (6.51 m^3/s); minimum observed, 0.10 ft^3/s (0.030 m^3/s) Aug. 4, 1930, Aug. 1, Sept. 12, 28, 1934. Probably no flow at times Sept. 1-19, 1931.

Maximum stage, 6.0 ft (1.83 m), caused by cloudburst, probably occurred in 1924 or 1925.

REMARKS.--Records good. No regulation. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1564: 1932, 1933-34(M), 1938(M). WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	7.5	8.9	6.9	12	8.7	16	76	40	11	4.1	5.3
2	6.7	7.3	8.9	5.5	11	7.3	15	74	42	11	4.5	5.3
3	6.7	7.3	8.0	5.3	10	8.1	13	74	40	10	4.9	5.3
4	6.5	9.2	6.5	5.2	9.8	9.2	14	75	36	9.2	5.3	4.9
5	6.5	9.5	5.6	5.1	9.5	8.4	14	76	33	9.2	5.3	4.5
6	6.5	8.1	5.6	5.1	9.0	8.1	15	78	30	11	4.9	4.4
7	6.7	8.1	5.6	5.1	8.7	7.8	19	80	27	8.9	4.7	4.5
8	6.7	8.3	5.4	5.2	8.5	8.4	21	84	25	8.7	4.7	5.5
9	6.7	8.6	5.2	5.5	8.3	8.1	22	88	25	8.4	3.9	5.3
10	8.4	9.0	5.0	6.0	8.1	8.9	27	94	26	7.8	3.9	4.9
11	7.3	9.6	5.0	7.0	8.0	9.5	32	100	23	7.3	4.2	4.7
12	7.0	9.8	5.0	8.5	7.8	8.9	38	115	21	9.2	4.2	4.5
13	6.3	10	5.0	12	7.8	10	48	125	24	11	3.7	4.4
14	6.7	11	5.0	16	8.9	8.9	52	140	27	11	3.7	4.2
15	7.5	11	5.0	15	8.4	9.2	52	148	24	10	3.7	4.5
16	7.5	10	8.0	15	7.8	11	61	151	21	9.5	3.9	4.5
17	7.0	9.2	40	15	8.1	11	70	144	22	9.2	3.7	4.5
18	7.0	8.6	51	14	7.3	9.5	73	138	22	9.2	3.7	4.4
19	7.8	8.0	42	13	8.1	11	72	134	19	10	3.7	4.4
20	11	7.0	29	12	8.9	12	66	124	17	9.8	3.7	4.9
21	8.4	6.6	19	12	8.1	15	60	103	15	9.8	3.7	5.1
22	7.8	6.2	14	13	7.5	14	57	88	15	9.5	3.6	4.9
23	7.6	6.0	13	13	8.7	14	66	78	14	8.7	3.9	5.3
24	7.3	6.0	13	14	8.4	15	74	83	17	7.8	4.5	6.7
25	7.0	7.6	12	14	8.1	16	78	90	15	7.3	5.1	7.5
26	7.0	9.8	11	14	8.1	17	80	72	14	6.7	5.5	6.3
27	6.7	9.2	12	13	8.4	17	80	61	14	6.7	5.1	6.1
28	7.0	9.2	11	13	8.4	18	78	60	13	4.2	4.9	5.7
29	7.0	8.9	9.0	10	------	16	76	56	13	3.9	4.9	5.5
30	6.7	8.7	7.5	13	------	17	75	46	12	3.9	4.7	5.3
31	6.3	------	6.5	12	------	17	------	37	------	3.9	4.9	------
TOTAL	222.3	255.3	387.7	322.5	241.7	360.0	1,466	2,890	684	263.8	135.2	153.3
MEAN	7.17	8.51	12.5	10.4	8.63	11.6	48.8	93.2	22.8	8.51	4.36	5.11
MAX	11	11	51	16	12	18	80	151	42	11	5.5	7.5
MIN	6.3	6.0	5.0	5.1	7.3	7.3	13	37	12	3.9	3.6	4.2
AC-FT	441	506	769	640	479	714	2,900	5,730	1,360	523	268	304

CAL YR 1972 TOTAL 8,317.9 MEAN 22.7 MAX 87 MIN 4.4 AC-FT 16,500
WTR YR 1973 TOTAL 7,379.9 MEAN 20.2 MAX 151 MIN 3.6 AC-FT 14,640

PEAK DISCHARGE (Base, 50 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-18	1000	2.73	52	5-16	0330	3.70	180

4-26 or 27 discharge unknown

GOOSE LAKE BASIN

11339500 DREWS CREEK NEAR LAKEVIEW, OREG.

LOCATION.--Lat 42°07'10", long 120°34'43", in NW¼NE¼ sec.10, T.40 S., R.18 E., Lake County, on left bank 10 ft (3 m) upstream from bridge, 2.0 mi (3.2 km) downstream from Willow Creek, 2.7 mi (4.3 km) downstream from Drews Dam, and 13 mi (21 km) southwest of Lakeview.

DRAINAGE AREA.--212 mi² (549 km²).

PERIOD OF RECORD.--January 1909 to September 1930 (yearly estimate only for water year 1920), March 1931 to September 1936 (irrigation seasons only), April 1937 to September 1938, March 1939 to October 1941, February 1942, April 1942 to September 1952, February 1953 to current year. Monthly discharge only October 1921 to September 1925, published in WSP 1315-A. Published as Drew Creek near Lakeview October 1918 to September 1959.

GAGE.--Water-stage recorder. Datum of gage is 4,827.0 ft (1,471.27 m) above mean sea level (levels by Bureau of Reclamation). See WSP 1931 for history of changes prior to July 4, 1953.

AVERAGE DISCHARGE.--42 years (1912-30, 1937-38, 1939-41, 1946-47, 1953-73), 72.4 ft³/s (2.050 m³/s), 52,450 acre-ft/yr (64.7 hm³/yr), including diversion by North Drews Canal.

EXTREMES.--Current year: Maximum discharge, 173 ft³/s (4.90 m³/s) Oct. 12, gage height, 2.59 ft (0.789 m), release from upstream construction; minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 7-9, Oct. 21 to Nov. 2.

Period of record: Maximum discharge, about 3,000 ft³/s (85.0 m³/s) Mar. 1, 2, 1910, from rating curve extended above 1,200 ft³/s (34.0 m³/s); no flow at times.

REMARKS.--Records good except those for November, December, and January, which are poor. Record herein, except average discharge, not adjusted for diversion by North Drews Canal. Since 1912, flow regulated by Drews Reservoir, capacity, 62,550 acre-ft (77.1 hm³). Diversion for irrigation above station, and since March 1914, North Drews Canal has diverted above station for irrigation of lands west of Lakeview.

REVISIONS (WATER YEARS).--WSP 1365: 1909-10, 1913, 1918(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.0	2.2	2.4	7.8	13	8.2	17	69	49	46	35
2	1.3	1.0	2.0	2.3	7.4	7.8	6.6	29	63	47	44	35
3	1.2	1.1	1.8	2.3	7.0	7.0	6.2	40	63	39	35	36
4	1.2	1.3	1.6	2.3	6.2	7.0	7.8	54	63	39	35	40
5	1.1	1.2	1.5	2.3	13	5.8	10	51	63	37	37	37
6	1.1	1.1	1.6	2.3	8.6	6.6	12	47	63	40	55	33
7	1.0	1.2	1.8	2.3	8.6	6.2	10	43	67	46	70	49
8	1.0	1.3	1.8	2.3	6.2	9.5	9.0	35	65	47	74	50
9	1.0	1.4	1.2	2.3	5.4	8.2	9.5	43	57	50	72	48
10	1.1	1.4	1.2	2.3	5.4	16	10	44	57	49	74	47
11	1.2	1.4	1.3	2.6	4.4	15	11	43	64	47	75	41
12	5.2	1.4	1.4	4.0	4.1	8.2	13	44	74	45	77	41
13	1.4	1.4	1.5	7.0	3.5	6.6	12	45	79	54	79	41
14	1.3	1.4	1.3	10	4.4	5.0	11	52	84	57	74	41
15	1.1	1.4	1.8	18	5.0	5.4	9.0	56	82	58	67	41
16	1.3	1.4	3.0	26	5.0	7.0	9.0	61	78	67	64	41
17	1.2	1.4	5.0	33	5.0	7.4	10	82	78	77	64	41
18	1.1	1.4	15	15	4.1	5.8	9.5	86	75	78	63	47
19	1.1	1.4	33	10	3.8	7.0	9.0	92	67	74	63	49
20	1.1	1.3	12	9.5	3.8	9.0	9.0	94	64	71	61	49
21	1.0	1.3	14	9.0	4.4	7.4	8.2	98	58	69	61	44
22	1.0	1.3	25	8.6	5.0	6.2	8.2	100	60	66	59	40
23	1.0	1.3	9.5	12	6.2	7.0	8.2	102	58	65	55	40
24	1.0	1.5	9.5	9.5	10	8.2	8.2	102	58	69	50	31
25	1.0	1.6	5.4	7.4	12	9.5	9.5	98	60	69	49	18
26	1.0	1.8	4.4	6.2	11	9.5	9.0	97	60	64	47	12
27	1.0	1.5	4.1	8.6	13	8.2	8.6	97	57	63	47	12
28	1.0	1.6	3.2	9.5	18	7.0	8.6	92	57	56	46	12
29	1.0	1.7	3.0	12	------	6.2	8.6	91	54	55	44	12
30	1.0	1.9	2.8	10	------	6.6	10	92	50	56	38	12
31	1.0	------	2.6	7.4	------	7.4	------	85	------	50	37	------
TOTAL	38.4	41.6	175.5	258.4	198.3	246.7	278.9	2.112	1.967	1.753	1.763	1.075
MEAN	1.24	1.38	5.66	8.34	7.08	7.96	9.30	68.1	64.9	56.5	56.9	35.8
MAX	5.2	1.9	33	33	18	16	13	102	84	78	79	50
MIN	1.0	1.0	1.2	2.3	3.5	5.0	6.2	17	50	37	35	12
AC-FT	76	82	348	513	393	489	553	4.190	3.860	3.480	3.500	2.130
(†)	3.8	0	0	0	0	0	382	4,950	4,470	3,720	3,710	2,580
(‡)	a29,160	a31,500	a34,700	a38,900	a42,000	a49,900	61,480	55,720	a46,100	37,130	a28,300	a23,100

CAL YR 1972 TOTAL 38.077.90 MEAN 104 MAX 1.020 MIN .80 AC-FT 75.530
WTR YR 1973 TOTAL 9.887.60 MEAN 27.1 MAX 102 MIN 1.0 AC-FT 19.610

† Diversion, in acre-feet, North Drews Canal.
‡ Monthend contents in acre-feet, of Drews Reservoir.
a Contents interpolated.

11340500 COTTONWOOD CREEK NEAR LAKEVIEW, OREG.

LOCATION.--Lat 42°14'05", long 120°30'05", in N½ sec.32, T.38 S., R.19 E., Lake County, on right bank 0.7 mi (1.1 km) downstream from Cottonwood Dam and 9 mi (14 km) northwest of Lakeview.

DRAINAGE AREA.--32.9 mi^2 (85.2 km^2).

PERIOD OF RECORD.--November 1908 to September 1919, May 1923 to November 1935, March to December 1936, April to December 1937, April 1938 to November 1942, March to November 1943, March to October 1944, February to November 1945, March 1946 to current year. Monthly discharge only May 1924 to September 1925, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,949.37 ft (1,508.568 m) above mean sea level (levels by Bureau of Reclamation). Prior to June 1, 1919, and May 1, 1924, to June 3, 1932, nonrecording gage at several sites within 0.6 mi (1.0 km) upstream at different datums. June 1 to Sept. 30, 1919, and June 4, 1932, to Sept. 14, 1961, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datums.

AVERAGE DISCHARGE.--52 years (1909-19, 1924-35, 1938-42, 1946-73), 21.7 ft^3/s (0.61 m^3/s), 15,720 acre-ft/yr (19.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 56 ft^3/s (1.59 m^3/s) June 7-10, maximum gage height, 2.20 ft (0.671 m) Jan. 7, backwater from ice; minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Oct. 1, Nov. 18-20, Sept. 28-30; minimum gage height, 0.98 ft (0.299 m) Nov. 20.

Period of record: Maximum discharge, between 500 and 1,000 ft^3/s (14.2 and 28.3 m^3/s) during period Apr. 26 to May 1, 1927, when natural flow, estimated as 170 ft^3/s (4.81 m^3/s), was augmented by water escaping from reservoir through break in outlet conduit near control gates; no flow at times.

REMARKS.--Records good. Flow regulated since 1923 by Cottonwood Reservoir, capacity, 7,540 acre-ft (9.30 hm^3). Since October 1961, 240 acre-ft (295,900 m^3) unregulated storage in Cottonwood Meadows, 9 mi (14 km) upstream. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1565: 1910-11, 1919, 1929, 1937(M). WSP 1931: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.40	.40	1.1	1.2	2.4	3.1	1.1	46	53	53	13
2	.40	.60	.40	1.0	1.2	1.8	2.8	1.1	44	53	53	13
3	.80	.70	.40	1.0	1.2	1.7	2.5	1.2	46	53	53	12
4	.90	.70	.40	1.0	1.2	1.6	2.4	1.2	46	48	53	12
5	.90	.60	.40	1.0	1.2	1.6	2.0	1.2	48	48	53	12
6	1.0	.60	.40	1.0	1.3	1.5	1.8	1.2	53	50	53	16
7	1.0	.80	.40	1.0	1.3	1.6	1.7	4.0	56	53	50	16
8	1.1	.80	.40	1.0	1.3	1.8	1.6	9.2	56	53	50	16
9	1.2	.80	.30	1.1	1.3	1.8	1.4	9.6	56	53	50	16
10	1.1	.80	.40	1.4	1.3	2.0	1.2	10	56	53	50	16
11	1.1	.60	.40	1.6	1.3	1.8	1.2	14	53	53	50	16
12	1.2	.40	.40	1.8	1.3	1.6	1.3	16	53	53	50	16
13	1.3	.40	.40	1.9	1.3	1.6	1.4	18	53	53	50	15
14	1.2	.40	.40	1.8	1.3	1.6	1.3	24	50	53	42	14
15	1.2	.40	.50	1.8	1.3	1.8	1.3	28	50	53	42	13
16	1.3	.30	.60	1.7	1.3	1.8	1.3	30	50	50	42	13
17	1.4	.30	.70	1.6	1.3	1.8	1.4	38	48	50	42	12
18	1.6	.20	1.0	1.5	1.3	1.8	1.3	40	48	50	38	12
19	1.7	.20	1.0	1.3	1.3	2.0	1.3	40	46	50	38	9.2
20	1.6	.20	1.1	1.1	1.3	2.2	1.2	42	46	48	36	7.2
21	1.1	.30	1.6	1.2	1.3	2.0	1.1	44	46	48	30	5.0
22	.80	.30	1.4	1.1	1.4	2.5	1.1	46	48	46	28	3.0
23	.60	.50	1.2	1.2	1.5	3.0	1.1	48	48	46	28	1.3
24	.60	.50	1.3	1.2	1.6	3.0	1.1	48	48	46	28	1.1
25	.70	.40	1.2	1.1	1.8	3.0	1.1	50	48	46	28	.80
26	.60	.50	1.1	1.1	1.8	3.0	1.1	48	48	46	26	.60
27	.50	.40	1.0	1.0	2.0	3.0	1.1	48	50	46	24	.30
28	.40	.40	1.0	1.3	2.5	2.8	1.1	50	50	48	19	.20
29	.40	.40	1.0	1.2	------	2.6	1.1	50	53	50	16	.20
30	.40	.40	1.1	1.2	------	2.6	1.1	50	53	50	13	.20
31	.40	------	1.2	1.2	------	2.8	------	50	------	53	13	------
TOTAL	28.70	14.30	23.50	39.5	39.4	66.1	44.5	861.8	1.496	1.555	1.201	282.10
MEAN	.93	.48	.76	1.27	1.41	2.13	1.48	27.8	49.9	50.2	38.7	9.40
MAX	1.7	.80	1.6	1.9	2.5	3.0	3.1	50	56	53	53	16
MIN	.20	.20	.30	1.0	1.2	1.5	1.1	1.1	44	46	13	.20
AC-FT	57	28	47	78	78	131	88	1.710	2.970	3.080	2.380	560
(†)	-	a390	-	a1,800	a2,200	a3,500	a7,100	a8,200	a5,600	2,660	a570	a140

CAL YR 1972 TOTAL 11.367.00 MEAN 31.1 MAX 154 MIN .20 AC-FT 22.550
WTR YR 1973 TOTAL 5.651.90 MEAN 15.5 MAX 56 MIN .20 AC-FT 11.210

† Month-end contents, in acre-ft, of Cottonwood Reservoir.

a Contents interpolated.

11492200 CRATER LAKE NEAR CRATER LAKE, OREG.
(Hydrologic bench-mark station)

LOCATION.--Lat 42°58'45", long 122°04'45", (unsurveyed) Crater Lake National Park and Vicinity Quadrangle, Klamath County, at boat harbor at end of trail in Cleetwood Cove and 6 mi (10 km) northeast of Crater Lake post office.

DRAINAGE AREA.--26.2 mi² (67.9 km²), of which 20.5 mi² (53.1 km²) is lake area at elevation 6,176 ft (1,882.4 m).

PERIOD OF RECORD.--October 1961 to current year. 1878 to September 1961 (fragmentary records) available in files of Portland district office.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, unadjusted. Prior to September 1961, nonrecording gage and various reference points used near old boat landing at abandoned trail (Eagle Cove) directly across Lake.

EXTREMES.--Current year: Maximum elevation, 6,176.57 ft (1,882.619 m), occurred during period Dec. 4 to June 14, from recorded range in stage; minimum, 6,174.37 ft (1,881.948 m) Sept. 22.

Period of record: Maximum observed elevation, 6,179.06 ft (1,883.377 m) from high-water mark, occurred in 1958 and noted Aug. 10, 1960; minimum observed, 6,163.2 ft (1,878.54 m) Sept. 10, 1942.

Maximum elevation known, 6,180.5 ft (1,883.82 m), average of several observations of line of crustose lichens made between 1916 and 1960; that stage may have occurred near the close of the 19th century. The occurrence of living pine trees slightly higher suggests that the lake has not been materially higher for several centuries.

REMARKS.--Crater Lake occupies the caldera of prehistoric Mount Mazama. It has no visible inlet or outlet. Over a period of years precipitation and runoff from snow melt on the walls of the crater are offset by seepage and evaporation. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report. Records of accumulated annual precipitation, collected at the north rim of Crater Lake as part of the operation of this station, are published annually in reports of the National Weather Service.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,176.17	6,175.95	6,175.86							6,175.87	6,175.42	6,174.71
2	6,176.16	6,175.92	6,175.87							6,175.86	6,175.39	6,174.69
3	6,176.15	6,175.99	6,175.92							6,175.84	6,175.39	6,174.68
4	6,176.12	6,176.03								6,175.84	6,175.37	6,174.65
5	6,176.09	6,176.00								6,175.82	6,175.36	6,174.64
6	6,176.05	6,175.99								6,175.80	6,175.34	6,174.63
7	6,176.04	6,175.99								6,175.78	6,175.31	6,174.60
8	6,176.03	6,175.97								6,175.77	6,175.28	6,174.58
9	6,176.06	6,175.98								6,175.75	6,175.26	6,174.54
10	6,176.14	6,175.95								6,175.74	6,175.24	6,174.53
11	6,176.16	6,175.93								6,175.74	6,175.21	6,174.52
12	6,176.18	6,175.92								6,175.69	6,175.19	6,174.51
13	6,176.18	6,175.93								6,175.67	6,175.18	6,174.49
14	6,176.19	6,175.93								6,175.66	6,175.16	6,174.47
15	6,176.17	6,175.92							6,175.94	6,175.66	6,175.15	6,174.44
16	6,176.16	6,175.91							6,176.00	6,175.64	6,175.12	6,174.43
17	6,176.15	6,175.89							6,176.01	6,175.63	6,175.09	6,174.40
18	6,176.13	6,175.90							6,176.00	6,175.62	6,175.06	6,174.38
19	6,176.12	6,175.93							6,175.98	6,175.62	6,175.02	6,174.42
20	6,176.10	6,175.91							6,175.98	6,175.61	6,175.00	6,174.41
21	6,176.09	6,175.92							6,175.98	6,175.58	6,174.95	6,174.38
22	6,176.07	6,175.90							6,175.97	6,175.57	6,174.94	6,174.43
23	6,176.05	6,175.88							6,175.95	6,175.55	6,174.90	6,174.52
24	6,176.02	6,175.87							6,175.93	6,175.53	6,174.90	6,174.63
25	6,176.02	6,175.89							6,175.93	6,175.52	6,174.87	6,174.60
26	6,175.97	6,175.92							6,175.92	6,175.51	6,174.86	6,174.58
27	6,175.97	6,175.90							6,175.91	6,175.49	6,174.84	6,174.56
28	6,175.99	6,175.90							6,175.90	6,175.49	6,174.82	6,174.55
29	6,175.95	6,175.88			------				6,175.90	6,175.47	6,174.81	6,174.54
30	6,175.94	6,175.87			------				6,175.89	6,175.45	6,174.78	6,174.51
31	6,175.93	------			------		------		------	6,175.44	6,174.74	------
MEAN	6,176.08	6,175.93								6,175.65	6,175.10	6,174.53
MAX	6,176.19	6,176.03								6,175.87	6,175.42	6,174.71
MIN	6,175.93	6,175.87								6,175.44	6,174.74	6,174.38

NOTE.--No gage-height record Dec. 4 to June 14.

11493500 WILLIAMSON RIVER NEAR KLAMATH AGENCY, OREG.

LOCATION.--Lat 42°44'25", long 121°50'00", in NW¼SW¼ sec.1, T.33 S., R.7 E., Klamath County, on right bank 250 ft (76 m) downstream from highway bridge, 0.6 mi (1.0 km) southwest of railroad station at Kirk, 10 mi (16 km) upstream from Spring Creek, and 10 mi (16 km) northeast of Klamath Agency.

DRAINAGE AREA.--1,290 mi^2 (3,340 km^2), approximately.

PERIOD OF RECORD.--March 1908 to January 1909, April 1909 to June 1910, October 1954 to current year. Monthly discharge only June 1910, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 4,481.34 ft (1,365.912 m) above mean sea level. Mar. 25, 1908, to June 30, 1910, nonrecording gage or water-stage recorder at two sites about 0.5 mi (0.8 km) upstream at different datums. Oct. 1, 1954, to Sept. 30, 1955, water-stage recorder at present site at datum 2.05 ft (0.625 m) higher.

AVERAGE DISCHARGE.--19 years (1954-73), 209 ft^3/s (5.92 m^3/s), 151,400 acre-ft/yr (187 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 449 ft^3/s (12.7 m^3/s) Mar. 11, gage height, 4.73 ft (1.442 m); no flow Oct. 1, 2, July 15 to Sept. 30.

Period of record: Maximum discharge observed, 1,590 ft^3/s (45.0 m^3/s) Mar. 13, 1910, gage height, 3.7 ft (1.13 m), site and datum then in use, from rating curve extended above 800 ft^3/s (22.7 m^3/s); no flow at times during 1960-73.

REMARKS.--Records good above 50 ft^3/s (1.42 m^3/s), fair below. Flow affected by natural storage in Klamath Marsh. Small diversions above station for irrigation in vicinity of marsh.

REVISIONS (WATER YEARS).--WSP 1565: 1908-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	135	212	260	295	336	348	161	51	3.6		
2	0	140	206	260	290	357	344	151	47	2.8		
3	.22	145	222	250	290	376	340	142	45	2.4		
4	.37	150	209	250	285	395	336	144	43	1.8		
5	.45	155	200	250	284	400	318	141	39	1.4		
6	.51	160	190	250	295	411	306	130	35	1.1		
7	.51	160	180	250	295	416	306	125	32	.94		
8	.48	165	170	255	295	427	295	118	29	.78		
9	.57	170	165	255	303	416	284	112	28	.73		
10	.90	170	160	260	303	416	284	113	27	.58		
11	1.6	170	160	270	306	433	276	110	24	.50		
12	3.4	175	155	272	299	427	269	111	20	.39		
13	5.2	175	155	331	295	433	266	109	20	.21		
14	8.8	177	154	357	291	433	259	106	19	.09		
15	12	177	149	367	291	433	252	102	16	.01		
16	15	180	142	395	284	416	238	97	14	0		
17	19	183	145	416	280	405	225	92	13	0		
18	25	180	160	416	273	395	219	85	14	0		
19	31	186	190	411	269	386	228	81	13	0		
20	38	192	220	411	273	395	230	80	12	0		
21	42	197	260	405	273	395	224	77	11	0		
22	48	200	310	405	269	405	214	72	9.2	0		
23	52	200	330	400	269	400	215	68	8.4	0		
24	62	203	340	391	269	395	210	66	8.4	0		
25	72	195	340	381	280	395	203	66	7.6	0		
26	84	195	330	367	299	391	195	64	6.9	0		
27	95	206	320	350	318	376	188	62	6.4	0		
28	100	209	310	330	327	371	183	62	5.7	0		
29	110	215	290	320	------	353	177	59	5.0	0		
30	120	215	280	310	------	353	170	57	4.7	0		
31	130	------	270	300	------	348	------	56	------	0		------
TOTAL	1.078.01	5.380	6.924	10.145	8.100	12.288	7.602	3.019	614.3	17.33	0	0
MEAN	34.8	179	223	327	289	396	253	97.4	20.5	.56	0	0
MAX	130	215	340	416	327	433	348	161	51	3.6	0	0
MIN	0	135	142	250	269	336	170	56	4.7	0	0	0
AC-FT	2.140	10.670	13.730	20.120	16.070	24.370	15.080	5.990	1.220	34	0	0

CAL YR 1972 TOTAL 91.740.95 MEAN 251 MAX 1.020 MIN 0 AC-FT 182.000
WTR YR 1973 TOTAL 55.167.64 MEAN 151 MAX 433 MIN 0 AC-FT 109.400

11497500 SPRAGUE RIVER NEAR BEATTY, OREG.

LOCATION.--Lat 42°26'50", long 121°14'15", in NW¼SE¼ sec.13, T.36 S., R.12 E., Klamath County, on right bank 1.6 mi (2.6 km) east of Beatty, and 4.6 mi (7.4 km) upstream from Sycan River.

DRAINAGE AREA.--513 mi² (1,329 km²).

PERIOD OF RECORD.--April to September 1912 and November 1912 to September 1913 (fragmentary), October 1913 to September 1915, February to November 1916, March 1917 to June 1918, May 1919 to October 1920, February 1921 to September 1926 (irrigation seasons only), October 1953 to current year. Monthly discharge only October 1913, published in WSP 1315-B. Prior to October 1917, published as "near Yainax."

GAGE.--Water-stage recorder. Datum of gage is 4,305.35 ft (1,312.271 m) above mean sea level. Apr. 19, 1912, to Feb. 19, 1914, nonrecording gage, Feb. 20, 1914, to Sept. 11, 1917, water-stage recorder, and Sept. 12, 1917, to Sept. 30, 1926, nonrecording gage, at site 2 mi (3 km) upstream at different datum.

AVERAGE DISCHARGE.--23 years (1913-15, 1919-20, 1953-73), 314 ft³/s (8.89 m³/s), 227,500 acre-ft/yr (281 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 620 ft³/s (17.6 m³/s) Jan. 13, gage height, 4.50 ft (1.372 m); minimum, 85 ft³/s (2.41 m³/s) Aug. 22.

Period of record: Maximum discharge, 6,980 ft³/s (198 m³/s) Dec. 23, 1964, gage height, 12.19 ft (3.716 m); minimum observed, 57 ft³/s (1.61 m³/s) June 30, 1924, June 20, 1926.

REMARKS.--Records good. No regulation. Diversions for irrigation above station in the vicinity of Bly.

REVISIONS (WATER YEARS).--WSP 1315-B: 1917(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	190	177	169	171	297	245	534	311	119	104	116
2	192	192	180	184	184	306	241	509	281	116	105	102
3	167	190	188	180	184	261	228	500	263	117	102	104
4	169	203	163	157	184	245	230	484	234	119	102	107
5	167	207	150	145	201	226	250	506	224	116	105	112
6	161	192	140	175	254	219	288	503	211	112	105	109
7	165	192	130	161	241	222	315	467	201	112	105	117
8	163	196	130	161	239	222	308	450	198	112	112	116
9	180	190	130	173	241	243	311	444	180	109	109	111
10	190	190	130	169	256	243	332	430	173	100	105	110
11	203	190	130	184	254	334	358	417	180	95	107	110
12	228	186	130	267	252	263	396	414	182	92	104	109
13	230	186	140	562	234	239	430	417	184	100	102	107
14	226	190	160	492	226	217	425	436	165	102	100	110
15	217	190	169	299	245	213	412	461	165	105	100	113
16	207	188	177	370	226	213	412	509	171	105	97	112
17	201	184	192	464	215	226	439	554	167	102	95	113
18	194	182	222	292	203	224	458	486	169	102	93	111
19	190	190	297	245	186	222	404	478	171	102	93	117
20	186	190	375	201	190	222	360	406	165	107	90	133
21	184	182	356	219	190	228	308	396	145	109	90	152
22	182	182	401	194	190	222	332	365	138	107	87	141
23	180	167	391	184	192	215	370	339	140	109	93	141
24	177	177	294	198	198	226	396	341	138	116	100	152
25	177	182	254	196	213	247	436	481	140	117	100	179
26	177	192	228	173	234	267	436	425	138	112	104	177
27	177	203	219	165	234	269	520	378	123	109	102	170
28	180	192	207	196	256	256	562	339	130	112	97	156
29	180	194	171	184	------	236	579	292	126	107	93	149
30	177	186	188	192	------	234	554	265	121	109	102	148
31	180	------	196	182	------	247	------	306	------	110	109	------
TOTAL	5,772	5,675	6,415	7,133	6,093	7,504	11,335	13,332	5,334	3,361	3,112	3,804
MEAN	186	189	207	230	218	242	378	430	178	108	100	127
MAX	230	207	401	562	256	334	579	554	311	119	112	179
MIN	161	167	130	145	171	213	228	265	121	92	87	102
AC-FT	11,450	11,260	12,720	14,150	12,090	14,880	22,480	26,440	10,580	6,670	6,170	7,550

CAL YR 1972 TOTAL 148,812 MEAN 407 MAX 2,280 MIN 109 AC-FT 295,200
WTR YR 1973 TOTAL 78,870 MEAN 216 MAX 579 MIN 87 AC-FT 156,400

11501000 SPRAGUE RIVER NEAR CHILOQUIN, OREG.

LOCATION.--Lat 42°35'05", long 121°50'55", in NE¼NW¼ sec.35, T.34 S., R.7 E., Klamath County, on right bank 1.0 mi (1.6 km) northeast of Chiloquin, 4.6 mi (7.4 km) upstream from Modoc Point Canal intake, and at mile 5.4 (8.7 km).

DRAINAGE AREA.--1,580 mi^2 (4,090 km^2), approximately.

PERIOD OF RECORD.--July to October 1920, March 1921 to current year. Monthly discharge only July 1920, published in WSP 1315-B. Prior to October 1931, published as "at McCready Ranch, near Chiloquin."

GAGE.--Water-stage recorder. Datum of gage is 4,202.43 ft (1,280.901 m) above mean sea level. Prior to Oct. 1, 1931, nonrecording gage at site 12 mi (19 km) upstream at different datum.

AVERAGE DISCHARGE.--52 years (1921-73), 570 ft^3/s (16.1 m^3/s), 413,000 acre-ft/yr (509 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 872 ft^3/s (24.7 m^3/s) Jan. 16, gage height, 2.71 ft (0.826 m); minimum, 155 ft^3/s (4.39 m^3/s) July 15.

Period of record: Maximum discharge, 14,900 ft^3/s (422 m^3/s) Dec. 26, 1964, gage height, 10.37 ft (3.161 m); minimum daily, 50 ft^3/s (1.42 m^3/s) May 26, 27, 1926.

REMARKS.--Records good. Regulation by ponding at irrigation dams. Diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 591: 1922(M). WSP 1011: 1943(M). WSP 1565: 1921-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	341	366	400	390	580	443	794	460	232	205	178
2	306	343	361	424	380	613	446	817	430	227	195	182
3	305	351	361	375	376	669	428	800	437	226	193	205
4	314	363	366	407	385	674	411	782	426	223	196	213
5	315	364	385	436	395	619	403	755	395	207	192	212
6	307	367	316	357	400	575	398	741	359	197	190	217
7	303	376	300	380	434	532	415	739	346	198	191	219
8	304	369	280	400	480	506	451	730	333	190	208	212
9	310	362	260	380	480	490	488	701	313	194	213	208
10	318	366	260	380	485	490	491	680	301	200	204	218
11	330	363	260	400	495	500	486	671	306	196	202	219
12	342	362	260	420	506	511	499	665	284	186	209	209
13	356	365	260	470	495	575	523	640	282	181	207	205
14	373	359	260	520	480	537	543	632	275	167	205	206
15	389	357	260	772	464	490	565	615	278	159	202	214
16	390	363	280	860	459	449	573	600	279	165	193	216
17	378	363	300	752	469	429	570	606	280	163	191	222
18	367	361	320	762	444	429	566	614	273	174	183	229
19	360	362	360	830	429	434	582	653	280	187	191	232
20	355	361	440	709	414	429	602	643	273	188	196	241
21	352	365	537	579	400	424	588	608	263	192	201	245
22	349	369	630	486	395	416	547	573	255	193	195	251
23	347	360	698	476	395	410	494	541	245	204	181	270
24	344	352	746	439	404	416	500	556	237	225	177	279
25	342	343	728	409	414	408	534	558	248	221	186	274
26	337	348	658	419	429	411	561	540	247	216	192	278
27	338	361	580	404	485	427	586	572	243	212	204	286
28	341	366	527	390	564	453	594	620	244	212	203	300
29	341	371	495	376	------	459	649	592	246	203	203	299
30	338	366	459	395	------	458	722	547	233	193	203	292
31	338	------	404	395	------	441	------	506	------	201	193	------
TOTAL	10,500	10,819	12,717	15,202	12,346	15,254	15,658	20,091	9,071	6,132	6,104	7,031
MEAN	339	361	410	490	441	492	522	648	302	198	197	234
MAX	390	376	746	860	564	674	722	817	460	232	213	300
MIN	303	341	260	357	376	408	398	506	233	159	177	178
AC-FT	20,830	21,460	25,220	30,150	24,490	30,260	31,060	39,850	17,990	12,160	12,110	13,950

CAL YR 1972 TOTAL 287,597 MEAN 786 MAX 4,970 MIN 218 AC-FT 570,400
WTR YR 1973 TOTAL 140,925 MEAN 386 MAX 860 MIN 159 AC-FT 279,500

11502500 WILLIAMSON RIVER BELOW SPRAGUE RIVER, NEAR CHILOQUIN, OREG.

LOCATION.--Lat 42°34'15", long 121°52'35", in NE¼NE¼ sec.4, T.35 S., R.7 E., Klamath County, on right bank 0.2 mi (0.3 km) downstream from Sprague River and 0.8 mi (1.3 km) southwest of Chiloquin.

DRAINAGE AREA.--3,000 mi^2 (7,770 km^2), approximately.

PERIOD OF RECORD.--June 1917 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,155.55 ft (1,266.612 m) above mean sea level. Prior to Sept. 1, 1923, at different datum.

AVERAGE DISCHARGE.--56 years, 1,031 ft^3/s (29.2 m^3/s), 747,000 acre-ft/yr (921 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,650 ft^3/s (46.7 m^3/s) Jan. 16, gage height, 3.59 ft (1.094 m); minimum, 404 ft^3/s (11.4 m^3/s) July 30.
Period of record: Maximum discharge, 16,100 ft^3/s (456 m^3/s) Dec. 26, 1964, gage height, 10.56 ft (3.219 m); minimum, 320 ft^3/s (9.06 m^3/s) Oct. 14, 1920.

REMARKS.--Records excellent. Some regulation by diversion dams and logpond operations on Sprague River. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 981: 1938(M). WSP 1565: 1920(M), 1927(M), 1938.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673	829	952	1,110	1,040	1,310	1,180	1,230	785	500	425	455
2	666	832	952	1,150	1,030	1,360	1,180	1,250	755	493	425	455
3	665	851	960	1,090	1,020	1,450	1,160	1,240	755	493	418	470
4	664	873	944	1,040	1,020	1,480	1,140	1,240	740	493	433	485
5	659	872	832	1,000	1,030	1,430	1,110	1,190	710	485	433	485
6	653	878	770	944	1,050	1,400	1,110	1,170	673	478	433	493
7	650	890	924	968	1,080	1,360	1,120	1,150	650	478	433	493
8	650	889	770	944	1,120	1,330	1,150	1,140	635	470	455	493
9	662	887	778	944	1,140	1,320	1,180	1,100	613	478	470	485
10	676	895	770	920	1,160	1,310	1,180	1,080	598	470	463	493
11	686	899	763	952	1,170	1,330	1,180	1,070	598	463	455	500
12	695	896	778	1,110	1,180	1,350	1,140	1,070	583	455	470	485
13	732	901	778	1,210	1,170	1,420	1,160	1,040	568	448	470	485
14	766	904	793	1,240	1,160	1,390	1,180	1,020	560	440	463	485
15	785	904	800	1,480	1,130	1,330	1,180	1,000	560	433	463	485
16	783	912	808	1,620	1,120	1,280	1,180	976	568	433	448	493
17	772	912	832	1,550	1,120	1,250	1,170	984	560	433	448	500
18	764	912	856	1,540	1,100	1,240	1,150	984	553	440	440	508
19	763	912	928	1,600	1,090	1,240	1,160	1,010	553	463	448	515
20	763	920	992	1,490	1,070	1,240	1,180	1,000	545	463	455	523
21	765	928	1,120	1,340	1,050	1,240	1,170	960	538	455	463	530
22	769	936	1,270	1,230	1,060	1,230	1,110	928	530	455	455	538
23	774	928	1,370	1,200	1,050	1,220	1,020	888	530	448	448	560
24	781	928	1,460	1,180	1,060	1,220	1,010	904	515	463	448	583
25	788	928	1,450	1,130	1,080	1,200	1,020	896	515	455	455	568
26	789	920	1,400	1,110	1,110	1,200	1,040	880	515	448	455	568
27	796	936	1,330	1,090	1,180	1,210	1,060	896	515	440	470	583
28	807	944	1,270	1,080	1,280	1,220	1,050	944	508	433	478	590
29	813	952	1,230	1,050	------	1,220	1,090	928	515	425	478	590
30	816	952	1,190	1,080	------	1,220	1,160	872	500	411	485	590
31	820	------	1,140	1,060	------	1,200	------	832	------	418	478	------
TOTAL	22,845	27,120	31,110	36,452	30,870	40,200	33,920	31,872	17,743	14,160	14,061	15,486
MEAN	737	904	1,004	1,176	1,103	1,297	1,131	1,028	591	457	454	516
MAX	820	952	1,460	1,620	1,280	1,480	1,180	1,250	785	500	485	590
MIN	650	829	763	920	1,020	1,200	1,010	832	500	411	418	455
AC-FT	45,310	53,790	61,710	72,300	61,230	79,740	67,280	63,220	35,190	28,090	27,890	30,720

CAL YR 1972 TOTAL 506,800 MEAN 1,385 MAX 6,570 MIN 559 AC-FT 1,005,000
WTR YR 1973 TOTAL 315,839 MEAN 865 MAX 1,620 MIN 411 AC-FT 626,500

11506000 "A" CANAL AT KLAMATH FALLS, OREG.

LOCATION.--Lat 42°12'20", long 121°48'05", in NE¼ sec.30, T.38 S., R.9 E., Klamath County, on left bank 300 ft (91 m) downstream from headgates of canal and 1 mi (1.6 km) northwest of Klamath Falls.

PERIOD OF RECORD.--October 1910 to current year. Published as "Klamath Main Canal" 1911-12.

GAGE.--Water-stage recorder. Datum of gage is 4,126.22 ft (1,257.672 m) above mean sea level, Bureau of Reclamation datum (levels by Bureau of Reclamation). Prior to May 1, 1923, water-stage recorder at site 0.2 mi (0.3 km) downstream at head of tunnel and at different datum. May 1, 1923, to Apr. 20, 1924, water-stage recorder at site 1 mi (1.6 km) downstream, just below tunnel, at different datum. Apr. 21, 1924, to Apr. 14, 1925, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--62 years, 259 ft³/s (7.33 m³/s), 187,600 acre-ft/yr (231 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 1,180 ft³/s (33.4 m³/s) June 24, 1961; no flow for several months in each year.

REMARKS.--Records excellent. Canal diverts water from Upper Klamath Lake in NE¼ sec.30, T.38 S., R.9 E., for irrigation of lands east of Klamath River on both sides of Lost River. Most of return water reaches Lost River.

COOPERATION.--Gage-height record, and records of daily discharge furnished by Klamath Irrigation District; one discharge measurement made and records reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400						0	786	950	973	1,030	815
2	361						0	815	960	970	1,020	815
3	359						0	845	979	960	1,010	805
4	381						0	875	1,010	957	985	785
5	395						64	829	1,030	970	960	805
6	414						146	798	1,040	1,000	962	800
7	419						182	770	1,050	1,030	982	785
8	426						190	772	1,040	1,020	996	780
9	401						190	777	1,050	1,020	963	755
10	355						200	790	1,030	1,030	940	700
11	301						238	830	992	1,040	900	720
12	257						303	874	1,000	1,050	880	730
13	230						341	920	1,000	1,050	870	710
14	218						358	950	1,000	1,040	870	685
15	197						378	950	988	1,040	870	680
16	57						413	942	964	1,040	875	650
17	0						439	967	944	1,060	892	637
18	0						450	984	935	1,060	900	630
19	0						455	1,010	945	1,060	910	590
20	0						448	1,020	945	1,030	903	545
21	0						465	1,020	970	1,010	900	495
22	0						485	1,000	970	1,000	910	465
23	0						541	1,020	950	995	919	404
24	0						625	1,020	970	985	897	345
25	0						685	975	977	985	860	317
26	0						723	916	960	975	810	298
27	0						736	878	960	965	772	273
28	0						775	865	947	965	791	275
29	0				------		790	904	960	985	805	280
30	0				------		790	933	973	1,020	820	285
31	0	------			------		------	947	------	1,030	815	------
TOTAL	5,171	0	0	0	0	0	11,410	27,982	29,489	31,315	28,017	17,859
MEAN	167	0	0	0	0	0	380	903	983	1,010	904	595
MAX	426	0	0	0	0	0	790	1,020	1,050	1,060	1,030	815
MIN	0	0	0	0	0	0	0	770	935	957	772	273
AC-FT	10,260	0	0	0	0	0	22,630	55,500	58,490	62,110	55,570	35,420

CAL YR 1972 TOTAL 139,963.00 MEAN 382 MAX 1,100 MIN 0 AC-FT 277,600
WTR YR 1973 TOTAL 151,243.00 MEAN 414 MAX 1,060 MIN 0 AC-FT 300,000

11507000 UPPER KLAMATH LAKE NEAR KLAMATH FALLS, OREG.

LOCATION.--Lat 42°15'00", long 121°48'55", in NW¼SW¼ sec.19, T.38 S., R.9 E., Klamath County, at southeast end of lake, 1.4 mi (2.3 km) upstream from outlet and 2.5 mi (4.0 km) northwest of Main Street Bridge at Klamath Falls.

DRAINAGE AREA.--3,810 mi^2 (9,870 km^2), approximately, including 26.2 mi^2 (67.9 km^2) in closed basin of Crater Lake.

PERIOD OF RECORD.--May 1904 to September 1923 (gage heights only), October 1923 to current year. Monthend contents only October 1923 to September 1927, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 4,098.22 ft (1,249.137 m) above mean sea level: or 4,100.00 ft (1,249.680 m) above mean sea level, datum of Bureau of Reclamation. Gage readings have been reduced to elevations above mean sea level, datum of Bureau of Reclamation. See WSP 1735 for history of changes prior to Nov. 10, 1923.

EXTREMES.--Current year: Maximum elevation, 4,143.19 ft (1,262.844 m) Apr. 17 (caused by wind); maximum daily, 4,142.81 ft (1,262.728 m) Apr. 19; minimum, 4,138.25 ft (1,261.339 m) Sept. 19; minimum daily, 4,138.84 ft (1,261.518 m) Sept. 22.

Period of record: Maximum elevation, 4,144.98 ft (1,263.390 m) about Apr. 20, 1904, from high-water marks; minimum recorded, 4,135.55 ft (1,260.516 m) Oct. 30, 1944.

REMARKS.--Reservoir is formed by concrete dam at outlet of natural lake, completed in 1921, replacing a temporary dam built in 1919; controlled storage began Apr. 15, 1919. Capacity, 584,000 acre-ft (720 hm^3) between elevations 4,135.0 ft (1,260.35 m) and 4,143.3 ft (1,262.88 m). Dead storage below elevation 4,135.0 ft (1,260.35 m) not known. Stored water may be diverted through "A" Canal for irrigation of land under Klamath project of Bureau of Reclamation, or released to Link River through dam or powerplants at Klamath Falls. Contents given herein represent those above elevation 4,135.0 ft (1,260.35 m).

COOPERATION.--Capacity table furnished by Pacific Power & Light Co.

Capacity table (elevation, in feet, and contents, in acre-feet)

4,135.5	29,500	4,139	239,500	4,143	556,600
4,136	59,100	4,140	304,100	4,143.8	630,300
4,137	118,600	4,141	382,600		
4,138	178,700	4,142	468,000		

ELEVATION, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.141.18	4.141.15	4.141.10	4.141.13	4.141.32	4.141.78	4.142.57	4.142.61	4.142.53	4.141.36	4.140.15	4.139.27
2	4.141.20	4.141.15	4.141.07	4.141.12	4.141.31	4.141.72	4.142.44	4.142.59	4.142.48	4.141.32	4.140.12	4.139.23
3	4.141.23	4.141.10	4.141.15	4.141.13	4.141.31	4.141.68	4.142.44	4.142.65	4.142.38	4.141.32	4.140.10	4.139.20
4	4.141.42	4.141.30	4.141.27	4.141.12	4.141.30	4.141.83	4.142.42	4.142.79	4.142.33	4.141.27	4.140.08	4.139.21
5	4.141.28	4.141.23	4.141.01	4.141.10	4.141.32	4.141.76	4.142.49	4.142.72	4.142.32	4.141.28	4.140.03	4.139.21
6	4.141.14	4.140.98	4.141.05	4.141.11	4.141.34	4.141.81	4.142.57	4.142.67	4.142.29	4.141.22	4.139.96	4.139.20
7	4.141.10	4.141.23	4.141.07	4.141.10	4.141.36	4.141.88	4.142.45	4.142.62	4.142.26	4.141.14	4.139.89	4.139.26
8	4.141.05	4.141.27	4.141.06	4.141.10	4.141.36	4.141.95	4.142.47	4.142.62	4.142.21	4.141.08	4.139.85	4.139.23
9	4.141.00	4.141.17	4.141.05	4.141.11	4.141.37	4.141.91	4.142.48	4.142.67	4.142.30	4.141.06	4.139.88	4.139.15
10	4.140.95	4.141.21	4.141.05	4.141.11	4.141.40	4.142.01	4.142.49	4.142.65	4.142.22	4.141.07	4.139.80	4.139.10
11	4.140.85	4.141.32	4.141.03	4.141.11	4.141.44	4.142.08	4.142.50	4.142.70	4.142.10	4.141.13	4.139.80	4.139.10
12	4.141.12	4.141.22	4.141.02	4.141.16	4.141.45	4.142.10	4.142.50	4.142.70	4.142.00	4.141.07	4.139.72	4.139.08
13	4.141.03	4.141.04	4.141.03	4.141.21	4.141.47	4.142.24	4.142.62	4.142.67	4.142.10	4.140.95	4.139.70	4.139.12
14	4.141.12	4.141.30	4.141.01	4.141.24	4.141.50	4.142.05	4.142.60	4.142.64	4.142.09	4.140.83	4.139.70	4.139.08
15	4.141.12	4.141.15	4.140.99	4.141.23	4.141.52	4.141.98	4.142.57	4.142.61	4.141.91	4.140.76	4.139.70	4.139.08
16	4.141.15	4.141.29	4.140.97	4.141.27	4.141.55	4.141.92	4.142.48	4.142.63	4.141.84	4.140.69	4.139.69	4.139.12
17	4.141.16	4.141.26	4.141.00	4.141.25	4.141.57	4.142.04	4.142.75	4.142.66	4.141.83	4.140.62	4.139.66	4.139.07
18	4.141.25	4.141.21	4.141.01	4.141.26	4.141.58	4.141.80	4.142.61	4.142.69	4.141.75	4.140.62	4.139.55	4.138.93
19	4.141.27	4.141.21	4.141.02	4.141.38	4.141.59	4.141.58	4.142.81	4.142.74	4.141.75	4.140.65	4.139.48	4.138.85
20	4.141.22	4.141.28	4.141.06	4.141.35	4.141.60	4.142.08	4.142.77	4.142.68	4.141.72	4.140.53	4.139.41	4.138.97
21	4.141.18	4.141.31	4.141.11	4.141.38	4.141.62	4.142.06	4.142.68	4.142.65	4.141.64	4.140.63	4.139.46	4.139.00
22	4.141.22	4.141.31	4.141.16	4.141.38	4.141.61	4.142.18	4.142.67	4.142.61	4.141.53	4.140.50	4.139.47	4.138.84
23	4.141.30	4.141.26	4.141.20	4.141.37	4.141.59	4.142.20	4.142.70	4.142.45	4.141.57	4.140.48	4.139.48	4.139.03
24	4.141.28	4.141.24	4.141.22	4.141.34	4.141.33	4.142.18	4.142.68	4.142.52	4.141.60	4.140.40	4.139.32	4.139.14
25	4.141.20	4.141.17	4.141.22	4.141.35	4.141.48	4.142.26	4.142.66	4.142.60	4.141.53	4.140.43	4.139.43	4.139.18
26	4.141.35	4.141.21	4.141.20	4.141.35	4.141.60	4.142.38	4.142.62	4.142.53	4.141.53	4.140.40	4.139.36	4.139.22
27	4.141.23	4.141.16	4.141.19	4.141.34	4.141.71	4.142.39	4.142.77	4.142.52	4.141.56	4.140.34	4.139.33	4.139.23
28	4.141.28	4.141.10	4.141.19	4.141.34	4.141.66	4.142.42	4.142.76	4.142.53	4.141.60	4.140.26	4.139.31	4.139.23
29	4.141.27	4.141.10	4.141.15	4.141.33	------	4.142.27	4.142.76	4.142.54	4.141.60	4.140.22	4.139.34	4.139.27
30	4.141.30	4.141.10	4.141.15	4.141.32	------	4.142.27	4.142.71	4.142.53	4.141.51	4.140.20	4.139.34	4.139.38
31	4.141.22	------	4.141.17	4.141.32	------	4.142.38	------	4.142.57	------	4.140.15	4.139.42	------
MEAN	4.141.18	4.141.20	4.141.10	4.141.24	4.141.47	4.142.04	4.142.60	4.142.62	4.141.94	4.140.77	4.139.66	4.139.13
MAX	4.141.42	4.141.32	4.141.27	4.141.38	4.141.71	4.142.42	4.142.81	4.142.79	4.142.53	4.141.36	4.140.15	4.139.38
MIN	4.140.85	4.140.98	4.140.97	4.141.10	4.141.30	4.141.58	4.142.42	4.142.45	4.141.51	4.140.15	4.139.31	4.138.84
(†)	399,400	391,000	394,400	409,500	441,100	503,000	527,800	511,800	420,600	315,800	257,800	261,520
(‡)	+800	-8,400	+3,400	+15,100	+31,600	+61,900	+24,800	-16,000	-91,200	-104,700	-58,000	+3,720

WTR YR 1973 MEAN 4.141.25 MAX 4.142.81 MIN 4.138.84

† Contents in acre-feet, at end of month, obtained by averaging elevations for last 3 days of month and first 3 days of following month to compensate for wind effect.

‡ Change in contents, in acre-feet.

11507500 LINK RIVER AT KLAMATH FALLS, OREG.

LOCATION.--Lat 42°13'25", long 121°47'35", in SW¼NW¼ sec.32, T.38 S., R.9 E., Klamath County, on right bank 600 ft (183 m) upstream from outlet of Keno Canal and 0.4 mi (0.6 km) upstream from Main Street Bridge at Klamath Falls.

DRAINAGE AREA.--3,810 mi^2 (9,870 km^2), approximately, including 26.2 mi^2 (67.9 km^2) in closed basin of Crater Lake.

PERIOD OF RECORD.--May 1904 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,083.71 ft (1,244.715 m) above mean sea level, or 4,085.50 ft (1,245.260 m) above mean sea level, datum of Bureau of Reclamation. Prior to Sept. 14, 1912, water-stage recorder or nonrecording gages at several sites within 0.5 mi (0.8 km) of present site at various datums. Sept. 14, 1912, to Nov. 23, 1923, at site 600 ft (183 m) downstream at datum 5.42 ft (1.652 m) lower. Nov. 24, 1923, to Nov. 15, 1961, at site on left bank at present datum.

AVERAGE DISCHARGE.--69 years, 1,599 ft^3/s (45.3 m^3/s), 1,158,000 acre-ft/yr (1.43 km^3/yr), not adjusted for "A" Canal.

EXTREMES.--Current year: Maximum discharge, 3,640 ft^3/s (103 m^3/s) Dec. 28; minimum daily, 144 ft^3/s (4.08 m^3/s) Sept. 22.
Period of record: Maximum discharge, 9,400 ft^3/s (266 m^3/s) May 12, 1904, gage height at Main Street Bridge, 7.30 ft (2.225 m), datum then in use, from floodmarks; minimum daily, 17 ft^3/s (0.48 m^3/s) Dec. 13, 1937.

REMARKS.--Records good. Flow regulated since 1919 by Upper Klamath Lake (see station 11507000). Large diurnal fluctuation caused by powerplant above station. Water diverted above station by main or "A" Canal of Klamath project (see station 11506000). Many other diversions above lake. All records presented herein include flow in Keno Canal which, since September 1908, has diverted from Upper Klamath Lake at Link River Dam for power generation, and returns flow to Link River below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.190	1.760	2.470	2.650	2.310	1.520	1.280	624	1.050	1.050	606	313
2	1.190	1.710	2.420	2.620	2.310	1.690	1.300	597	1.090	995	606	332
3	1.350	1.540	2.390	2.210	2.370	1.750	1.310	696	1.120	915	568	318
4	1.440	1.460	2.470	2.270	2.370	2.020	1.370	834	767	818	629	501
5	1.550	1.380	2.550	2.280	2.210	1.970	1.420	840	763	855	578	1.010
6	1.620	1.540	2.640	2.290	2.250	2.070	1.500	660	900	905	406	836
7	1.620	1.550	2.380	2.290	1.970	2.060	1.410	544	1.120	905	376	719
8	1.540	1.750	2.220	2.670	1.780	2.080	1.160	508	1.160	905	419	411
9	1.490	2.080	1.920	2.310	1.630	1.750	1.240	497	1.290	791	432	359
10	1.470	2.060	1.830	2.310	1.560	1.770	1.340	462	1.380	782	428	337
11	1.350	1.930	2.300	2.340	1.670	1.530	1.390	592	1.130	818	435	285
12	1.370	1.890	2.170	2.330	1.700	2.110	1.160	649	1.100	885	444	478
13	1.080	1.900	2.260	2.380	1.690	2.280	1.070	657	1.110	905	436	445
14	1.090	1.910	2.640	2.620	1.700	2.210	917	837	1.110	1.010	423	381
15	1.090	1.980	2.610	2.580	1.650	2.160	838	897	1.100	855	431	381
16	1.140	2.240	2.550	2.630	1.620	1.910	837	890	1.030	1.050	431	331
17	1.290	2.280	2.350	2.640	1.650	1.920	956	850	986	737	437	279
18	1.290	2.210	2.370	2.500	1.750	1.890	915	894	843	925	421	344
19	1.290	2.140	2.320	2.420	1.740	1.660	792	815	832	809	424	359
20	1.290	2.250	2.000	2.600	1.750	1.200	782	801	873	827	414	221
21	1.280	2.400	2.310	2.680	1.760	1.030	800	682	814	737	430	152
22	1.230	2.680	2.930	2.750	1.750	1.020	548	846	981	631	450	144
23	1.240	2.800	3.230	2.620	1.740	1.040	635	1.140	946	538	394	148
24	1.240	2.810	3.380	2.340	1.810	1.110	1.100	1.170	743	529	361	152
25	1.240	2.840	3.440	2.320	1.840	1.160	1.100	803	629	529	486	152
26	1.310	2.860	3.520	2.240	1.880	1.170	1.100	555	631	529	470	152
27	1.280	2.870	3.530	2.300	1.810	1.190	959	478	631	529	809	148
28	1.300	2.860	3.460	2.370	1.540	1.180	937	612	728	529	448	148
29	1.330	2.850	2.880	2.320	-------	1.210	772	604	865	436	343	148
30	1.340	2.500	2.580	2.380	-------	1.240	695	749	952	389	329	148
31	1.540	-------	2.550	2.390	-------	1.240	-------	856	-------	555	326	-------
TOTAL	41.070	65.030	80.670	75.650	51.810	50.140	31.633	22.639	28.674	23.673	14.190	10.132
MEAN	1.325	2.168	2.602	2.440	1.850	1.617	1.054	730	956	764	458	338
MAX	1.620	2.870	3.530	2.750	2.370	2.280	1.500	1.170	1.380	1.050	809	1.010
MIN	1.080	1.380	1.830	2.210	1.540	1.020	548	462	629	389	326	144
AC-FT	81.460	129.000	160.000	150.100	102.800	99.450	62.740	44.900	56.870	46.960	28.150	20.100
MEAN†	1,492	2,168	2,602	2,440	1,850	1,617	1,435	1,633	1,939	1,774	1,362	933
AC-FT†	91,720	129,000	160,000	150,100	102,800	99,450	85,370	100,400	115,400	109,100	83,720	55,520

CAL YR 1972 TOTAL 748.781 MEAN 2.046 MAX 7.820 MIN 374 AC-FT 1.485.000 MEAN† 2,435 AC-FT† 1,763,000
WTR YR 1973 TOTAL 495.311 MEAN 1.357 MAX 3.530 MIN 144 AC-FT 982.400 MEAN† 1,771 AC-FT† 1,282,000

† Adjusted for diversion by "A" Canal.

11509500 KLAMATH RIVER AT KENO, OREG.

LOCATION.--Lat 42°08'00", long 121°57'40", in NW¼SE¼ sec.35, T.39 S., R.7 E., Klamath County, on left bank 1.7 mi (2.7 km) northwest of Keno and 4.5 mi (7.2 km) upstream from Spencer Creek.

DRAINAGE AREA.--3,920 mi^2 (10,200 km^2), approximately (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--June 1904 to December 1913, October 1929 to current year. Monthly discharge only October to December 1929, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 3,961 ft (1,207.3 m) above mean sea level (from river-profile survey). See WSP 1735 for history of changes prior to Nov. 6, 1954.

AVERAGE DISCHARGE.--53 years, 1,687 ft^3/s (47.8 m^3/s), 1,222,000 acre-ft/yr (1.51 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,030 ft^3/s (114 m^3/s), probably occurred Dec. 23, gage height, 8.85 ft (2.697 m), from recorded range in stage; minimum, 202 ft^3/s (5.72 m^3/s) Aug. 23; minimum daily, 238 ft^3/s (6.74 m^3/s) July 20, 25.

Period of record: Maximum discharge, 10,100 ft^3/s (286 m^3/s) Mar. 5, 1972, gage height, 12.73 ft (3.880 m); minimum, 26 ft^3/s (0.74 m^3/s) Sept. 23, 1956; minimum daily, 60 ft^3/s (1.70 m^3/s) May 19, 1934.

Maximum stage, 15.3 ft (4.66 m), from floodmark (original datum), about May 10, 1904, discharge, 9,250 ft^3/s (262 m^3/s).

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated since 1919 by Upper Klamath Lake (see station 11507000). Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,340	1,940	2,570	2,800	2,540	2,110	1,190	474	757	373	259	462
2	1,450	1,960	2,570	2,600	2,540	2,110	1,130	503	756	386	265	466
3	1,590	1,730	2,570	2,600	2,540	2,430	1,060	536	671	319	257	466
4	1,540	1,700	2,570	2,600	2,540	2,430	1,060	544	489	272	260	734
5	1,480	1,710	2,600	2,600	2,540	2,430	1,020	545	444	348	264	886
6	1,570	1,930	2,650	2,600	2,530	2,430	852	546	373	366	253	737
7	1,490	1,960	2,610	2,600	2,230	2,430	847	527	361	373	248	728
8	1,480	2,170	2,490	2,600	2,100	2,420	842	509	358	262	254	538
9	1,590	2,480	2,450	2,600	2,110	2,030	837	500	354	246	244	513
10	1,640	2,380	2,600	2,610	2,110	2,150	851	495	359	244	240	624
11	1,640	2,290	2,600	2,610	2,100	1,820	864	497	412	244	245	867
12	1,460	2,290	2,600	2,630	2,100	2,520	869	498	491	239	266	859
13	1,410	2,370	2,600	3,000	2,110	2,500	862	498	497	242	365	480
14	1,380	2,380	2,600	3,200	2,110	2,520	858	496	497	247	466	438
15	1,370	2,530	2,600	3,070	2,110	2,260	851	497	501	248	462	451
16	1,440	2,580	2,600	3,070	2,100	2,040	850	495	423	248	433	436
17	1,540	2,620	2,600	3,080	2,100	2,050	854	509	416	246	379	428
18	1,560	2,680	2,600	3,090	2,110	2,050	1,040	512	400	241	370	432
19	1,570	2,670	2,400	3,080	2,110	1,780	841	508	361	257	382	451
20	1,470	2,540	2,400	3,060	2,110	1,180	822	510	359	238	379	501
21	1,360	2,790	2,800	3,060	2,110	1,170	798	523	359	243	376	546
22	1,350	3,050	3,000	3,070	2,110	1,170	661	589	361	244	373	542
23	1,340	3,040	3,400	2,930	2,110	1,170	506	622	366	260	306	401
24	1,340	3,040	3,800	2,800	2,100	1,150	794	623	363	247	244	408
25	1,330	3,030	3,800	2,680	2,100	1,150	794	625	357	238	314	455
26	1,370	3,030	3,800	2,530	2,110	1,150	708	625	364	253	379	449
27	1,410	2,940	3,800	2,530	2,120	1,170	638	620	363	253	738	460
28	1,400	2,810	3,600	2,530	2,120	1,180	606	618	360	249	344	461
29	1,330	2,680	3,200	2,530	------	1,190	604	616	389	249	504	465
30	1,330	2,570	2,800	2,540	------	1,190	561	615	373	250	489	458
31	1,330	------	2,800	2,540	------	1,190	------	738	------	258	458	------
TOTAL	44,900	73,890	88,080	85,840	61,720	56,570	25,160	17,013	12,934	8,383	10,816	16,142
MEAN	1,448	2,463	2,841	2,769	2,204	1,825	839	549	431	270	349	538
MAX	1,640	3,050	3,800	3,200	2,540	2,520	1,190	738	757	386	738	886
MIN	1,330	1,700	2,400	2,530	2,100	1,150	506	474	354	238	240	401
AC-FT	89,060	146,600	174,700	170,300	122,400	112,200	49,900	33,750	25,650	16,630	21,450	32,020

CAL YR 1972 TOTAL 848,026 MEAN 2,317 MAX 9,780 MIN 241 AC-FT 1,682,000
WTR YR 1973 TOTAL 501,448 MEAN 1,374 MAX 3,800 MIN 238 AC-FT 994,600

NOTE.--No gage-height record Dec. 10 to Jan. 9.

11510700 KLAMATH RIVER BELOW JOHN C. BOYLE POWERPLANT, NEAR KENO, OREG.

LOCATION.--Lat 42°05'05", long 122°04'20", in SE¼SE¼ sec.14, T.40 S., R.6 E., Klamath County, on right bank 0.7 mi (1.1 km) downstream from John C. Boyle powerplant, 8 mi (13 km) downstream from Spencer Creek, and 8.5 mi (13.7 km) southwest of Keno.

DRAINAGE AREA.--4,080 mi² (10,570 km²), approximately (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--January 1959 to current year. Prior to Oct. 1, 1961, published as "below Big Bend powerplant."

GAGE.--Water-stage recorder. Datum of gage is 3,274.82 ft (998.165 m) above mean sea level (levels by Pacific Power & Light Co.).

AVERAGE DISCHARGE.--14 years, 1,864 ft³/s (52.8 m³/s), 1,350,000 acre-ft/yr (1.66 km³/yr).

EXTREMES.--Current year: Maximum discharge, 4,700 ft³/s (133 m³/s) Dec. 23, gage height, 6.91 ft (2.106 m); minimum, 312 ft³/s (8.84 m³/s) Aug. 16, 17; minimum daily, 351 ft³/s (9.94 m³/s) Aug. 25.
Period of record: Maximum discharge, 11,000 ft³/s (312 m³/s) Mar. 5, 1972, gage height, 9.33 ft (2.844 m); minimum, 283 ft³/s (8.01 m³/s) Feb. 17, 1968; minimum daily, 317 ft³/s (8.98 m³/s) July 25, 1968.

REMARKS.--Records excellent. Flow regulated by Upper Klamath Lake (see station 11507000). Large diurnal fluctuation caused by John C. Bolye powerplant and 2 powerplants below Upper Klamath Lake. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.600	1.750	2.820	3.160	2.710	2.260	1.400	808	1.030	575	630	610
2	1.600	2.280	2.800	2.990	2.710	2.300	1.360	827	983	625	365	620
3	1.700	2.170	2.820	2.810	2.710	2.630	1.290	760	885	625	625	620
4	1.800	1.860	2.810	2.800	2.700	2.700	1.260	853	673	358	365	1.060
5	1.860	1.860	2.840	2.800	2.710	2.590	1.300	808	570	678	358	1.070
6	1.860	2.220	2.870	2.800	2.730	2.590	1.140	802	625	706	635	1.040
7	1.540	2.220	2.870	2.810	2.430	2.590	1.140	808	667	536	361	1.060
8	1.540	2.380	2.870	2.800	2.250	2.200	969	766	625	536	630	662
9	1.920	2.460	2.880	2.770	2.290	2.170	1.090	808	580	509	361	662
10	1.920	2.780	2.880	2.800	2.250	2.470	1.160	760	580	500	760	1.060
11	1.870	2.500	2.870	2.800	2.290	2.020	1.160	760	580	473	361	1.070
12	1.810	2.480	2.870	2.800	2.070	2.710	1.120	760	754	482	358	1.060
13	1.760	2.480	2.870	3.110	2.410	2.770	1.170	766	754	478	766	625
14	1.550	2.770	2.870	3.340	2.390	2.730	1.160	724	754	460	625	754
15	1.540	2.850	2.870	3.230	2.210	2.460	1.110	736	748	473	630	667
16	1.860	2.850	2.880	3.230	2.280	2.190	1.150	784	620	491	742	358
17	1.540	2.850	2.880	3.250	2.260	2.220	1.110	784	684	491	730	808
18	1.900	2.850	2.880	3.220	2.260	2.210	1.120	748	625	478	615	766
19	1.550	2.850	2.730	3.220	2.260	2.030	1.150	859	620	491	354	718
20	2.020	2.850	2.820	3.190	2.250	1.370	1.090	678	575	482	748	712
21	1.550	2.910	2.990	3.170	2.250	1.400	1.060	808	630	482	667	948
22	1.540	3.230	3.520	3.190	2.280	1.350	427	899	620	482	662	899
23	1.860	3.220	3.820	3.070	2.290	1.370	1.320	899	625	482	575	361
24	1.540	3.230	4.140	2.940	2.260	1.340	1.090	899	580	482	570	814
25	1.540	3.230	4.090	2.890	2.250	1.370	1.020	892	625	439	351	760
26	1.540	3.220	4.040	2.670	2.260	1.360	941	892	625	358	354	718
27	1.540	3.170	4.090	2.680	2.300	1.370	962	846	580	645	1.050	724
28	1.550	3.050	3.840	2.730	2.300	1.400	853	892	625	361	724	712
29	1.550	2.950	3.500	2.700	------	1.400	846	790	625	372	700	718
30	1.790	2.780	3.170	2.700	------	1.400	802	840	625	630	754	625
31	1.470	------	3.160	2.700	------	1.400	------	976	------	365	879	------
TOTAL	52.210	80.300	97.360	91.370	66.360	62.370	32.770	25.232	20.092	15.545	18.305	23.281
MEAN	1.684	2.677	3.141	2.947	2.370	2.012	1.092	814	670	501	590	776
MAX	2.020	3.230	4.140	3.340	2.730	2.770	1.400	976	1.030	706	1.050	1.070
MIN	1.470	1.750	2.730	2.670	2.070	1.340	427	678	570	358	351	358
AC-FT	103.600	159.300	193.100	181.200	131.600	123.700	65.000	50.050	39.850	30.830	36.310	46.180

CAL YR 1972 TOTAL 953.088 MEAN 2.604 MAX 10.800 MIN 391 AC-FT 1.890.000
WTR YR 1973 TOTAL 585.195 MEAN 1.603 MAX 4.140 MIN 351 AC-FT 1.161.000

11516530 KLAMATH RIVER BELOW IRON GATE DAM, CALIF.

LOCATION.--Lat 41°55'41", long 122°26'35", in SE¼NE¼ sec.17, T.47 N., R.5 W., Siskiyou County, on left bank 0.1 mi (0.2 km) downstream from Bogus Creek, 0.6 mi (1.0 km) downstream from Iron Gate Dam, and 5.9 mi (9.5 km) northeast of Hornbrook.

DRAINAGE AREA.--4,630 mi^2 (12,000 km^2), approximately (not including Lost River and Lower Klamath Lake basins).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,162.44 ft (659.112 m) above mean sea level (levels by Pacific Power and Light Co.).

AVERAGE DISCHARGE.--13 years, 2,249 ft^3/s (63.7 m^3/s), 1,629,000 acre-ft/yr (2.01 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,790 ft^3/s (136 m^3/s) Dec. 24, gage height, 6.32 ft (1.926 m); minimum daily, 665 ft^3/s (18.8 m^3/s) July 31, Aug. 2, 3.

Period of record: Maximum discharge, 29,400 ft^3/s (833 m^3/s) Dec. 22, 1964, gage height, 13.63 ft (4.154 m), from rating curve extended above 15,000 ft^3/s (425 m^3/s), on basis of slope-area measurement of peak flow; minimum daily, 647 ft^3/s (18.3 m^3/s), Nov. 6, 1960, Sept. 24, Oct. 1, 1961.

REMARKS.--Records excellent. Flow regulated by Upper Klamath Lake, capacity, 584,000 acre-ft (720 hm^3), other smaller reservoirs, and diversions above station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of the California district report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,790	1,810	3,000	3,210	3,040	2,700	1,640	1,120	760	745	670	720
2	1,790	2,170	3,000	3,250	3,030	2,650	1,650	1,090	725	745	665	725
3	1,790	2,220	3,090	3,180	2,940	2,730	1,620	1,060	725	740	665	725
4	1,790	1,810	3,060	3,020	3,000	3,060	1,620	1,030	730	735	670	730
5	1,790	1,810	3,200	3,030	3,140	3,020	1,510	1,030	745	740	670	720
6	1,790	1,800	2,970	3,020	2,960	2,820	1,380	1,030	745	735	670	720
7	1,790	2,290	3,060	3,020	2,670	2,980	1,380	1,030	745	745	675	720
8	1,790	2,800	2,970	3,100	2,650	2,940	1,380	1,030	755	735	670	720
9	1,800	2,850	2,960	2,980	2,630	2,680	1,380	1,030	745	740	670	715
10	1,800	2,840	2,490	3,020	2,600	2,680	1,380	1,030	750	745	675	715
11	1,800	2,830	2,910	3,090	2,580	2,370	1,380	1,030	750	735	670	715
12	1,800	2,850	3,200	3,270	2,570	2,550	1,390	1,030	745	725	670	730
13	1,800	2,850	2,900	3,620	2,640	2,990	1,390	1,030	745	705	694	725
14	1,800	3,020	2,930	3,990	2,630	3,060	1,390	1,030	750	700	740	730
15	1,800	3,040	3,230	3,650	2,640	3,030	1,380	1,030	750	700	730	730
16	1,800	3,050	3,170	4,100	2,580	2,920	1,390	1,030	745	695	725	725
17	1,780	3,060	3,340	3,880	2,560	2,630	1,380	1,020	745	700	725	720
18	1,790	3,050	3,100	3,670	2,580	2,580	1,380	1,020	745	695	725	720
19	1,780	3,060	3,240	3,650	2,580	2,530	1,380	1,020	750	695	720	730
20	1,780	3,060	3,040	3,620	2,420	2,300	1,380	1,020	750	685	720	730
21	1,780	3,060	3,350	3,630	2,380	1,820	1,380	1,020	745	685	720	725
22	1,780	3,090	4,140	3,550	2,410	1,820	1,380	1,030	750	690	720	725
23	1,790	3,270	4,440	3,450	2,440	1,820	1,360	1,030	755	680	720	725
24	1,780	3,300	4,680	3,210	2,520	1,810	1,360	1,040	755	680	725	725
25	1,790	3,320	4,420	3,170	2,640	1,810	1,370	1,030	750	675	720	725
26	1,790	3,320	4,410	2,900	2,450	1,690	1,380	1,030	745	675	715	720
27	1,790	3,480	4,390	2,760	2,530	1,660	1,380	1,020	745	675	715	715
28	1,790	3,380	4,300	2,960	2,650	1,650	1,380	1,020	745	675	715	715
29	1,790	3,320	3,670	3,020	------	1,640	1,380	1,020	745	670	715	715
30	1,790	2,990	3,210	2,990	------	1,640	1,380	1,030	740	670	715	805
31	1,800	------	3,200	3,050	------	1,640	------	1,030	------	665	720	------
TOTAL	55,520	84,800	105,070	102,060	74,460	74,220	42,530	32,040	22,375	21,880	21,719	21,760
MEAN	1,791	2,827	3,389	3,292	2,659	2,394	1,418	1,034	746	706	701	725
MAX	1,800	3,480	4,680	4,100	3,140	3,060	1,650	1,120	760	745	740	805
MIN	1,780	1,800	2,490	2,760	2,380	1,640	1,360	1,020	725	665	665	715
AC-FT	110,100	168,200	208,400	202,400	147,700	147,200	84,360	63,550	44,380	43,400	43,080	43,160

CAL YR 1972 TOTAL 1,124,315 MEAN 3,072 MAX 16,200 MIN 690 AC-FT 2,230,000
WTR YR 1973 TOTAL 658,434 MEAN 1,804 MAX 4,680 MIN 665 AC-FT 1,306,000

12472800 COLUMBIA RIVER BELOW PRIEST RAPIDS DAM, WASH.

LOCATION.--Lat 46°37'44", long 119°51'49", in SE¼NW¼ sec.7, T.13 N., R.24 E., Grant County, on left bank 2.6 mi (4.2 km) downstream from Priest Rapids Dam, 14.7 mi (23.7 km) south of Beverly, and at mile 394.5 (634.8 km).

DRAINAGE AREA.--96,000 mi² (249,000 km²), approximately.

PERIOD OF RECORD.--January 1917 to current year. January 1917 to September 1930, at site 3.4 mi (5.5 km) downstream, published as "at Vernita." October 1930 to July 27, 1959, at site 46.5 mi (74.8 km) upstream, published as "at Trinidad."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 1, 1930, nonrecording gages at site 3.4 mi (5.5 km) downstream at datum 388.7 ft (118.48 m) above mean sea level, unadjusted. Oct. 1, 1930, to July 27, 1959, water-stage recorder at site 46.5 mi (74.8 km) upstream at datum 499.3 ft (152.19 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--56 years, 120,300 ft³/s (3,407 m³/s), 87,160,000 acre-ft/yr (107 km³/yr).

EXTREMES.--Current year: Maximum discharge, 266,000 ft³/s (7,530 m³/s) Nov. 13, elevation, 415.42 ft (126.620 m); minimum, 35,800 ft³/s (1,010 m³/s) Dec. 26, elevation, 396.19 ft (120.759 m).

Period of record: Maximum discharge, 692,600 ft³/s (19,600 m³/s) June 12, 1948, gage height, 59.35 ft (18.090 m), site and datum then in use; minimum, 4,120 ft³/s (117 m³/s) Feb. 10, 1932, gage height, 11.40 ft (3.475 m) site and datum then in use.

Flood of June 7, 1894, reached a discharge of about 740,000 ft³/s (21,000 m³/s), based on information obtained at other points.

REMARKS.--Records excellent. Diversions for irrigation of about 500,000 acres (202,400 hm²) above station. Flow regulated by 10 major reservoirs and numerous smaller reservoirs and powerplants.

REVISIONS.--WSP 1933: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74,300	72,300	110,000	74,200	113,000	103,000	89,500	100,000	107,000	70,400	124,000	68,800
2	95,700	71,800	89,700	91,900	110,000	97,900	113,000	71,100	83,500	113,000	96,100	38,900
3	85,200	88,300	87,800	104,000	77,300	90,700	129,000	73,200	58,000	115,000	104,000	38,100
4	87,000	79,100	126,000	117,000	90,700	80,700	124,000	86,100	97,700	57,800	93,000	87,100
5	94,200	66,600	124,000	108,000	114,000	95,600	103,000	73,300	97,200	85,800	87,500	98,400
6	55,600	90,500	108,000	110,000	118,000	92,200	133,000	60,100	111,000	96,200	116,000	90,100
7	42,800	73,500	107,000	107,000	109,000	92,400	118,000	94,000	106,000	80,300	140,000	75,900
8	55,300	76,400	156,000	124,000	92,900	99,700	85,100	98,600	89,800	84,700	139,000	67,400
9	92,800	76,600	146,000	135,000	91,800	96,900	114,000	96,600	75,300	106,000	121,000	60,400
10	101,000	79,200	133,000	118,000	85,500	88,000	118,000	84,800	54,900	120,000	122,000	105,000
11	105,000	70,600	151,000	114,000	72,700	79,100	99,300	89,100	104,000	123,000	121,000	81,800
12	82,000	67,800	150,000	77,300	124,000	109,000	100,000	62,500	118,000	102,000	59,200	83,700
13	71,400	104,000	174,000	69,900	128,000	116,000	115,000	60,800	107,000	108,000	112,000	72,800
14	51,500	84,600	144,000	52,800	136,000	115,000	70,400	101,000	94,500	90,100	125,000	62,800
15	48,600	88,800	151,000	83,200	86,000	65,100	63,100	95,000	82,500	56,200	115,000	57,600
16	73,500	92,100	91,700	86,600	67,200	94,100	105,000	94,000	58,100	119,000	112,000	62,400
17	79,600	96,000	72,100	67,100	73,900	95,000	98,800	86,900	44,100	152,000	85,400	80,000
18	94,500	78,900	104,000	80,500	87,600	82,500	112,000	86,100	78,500	129,000	72,200	79,500
19	107,000	62,200	120,000	84,200	104,000	110,000	102,000	62,100	84,800	120,000	41,300	81,900
20	81,200	86,800	96,800	75,800	119,000	121,000	101,000	64,900	82,400	114,000	105,000	73,200
21	58,000	102,000	77,600	58,200	97,200	114,000	86,200	84,700	87,400	102,000	110,000	75,800
22	47,600	106,000	100,000	74,400	98,400	123,000	71,800	88,600	89,400	93,900	117,000	57,600
23	78,400	80,500	69,600	80,800	86,900	127,000	109,000	94,000	69,700	131,000	109,000	50,700
24	91,900	83,300	42,100	97,400	74,200	69,000	121,000	94,200	71,000	146,000	80,100	81,200
25	98,100	75,000	38,000	125,000	63,500	69,000	110,000	86,500	106,000	140,000	46,000	78,100
26	98,500	64,200	44,800	111,000	102,000	111,000	81,700	48,000	106,000	132,000	44,000	74,600
27	103,000	96,600	90,300	66,200	99,000	118,000	97,800	47,700	85,600	112,000	98,400	74,700
28	76,300	90,000	87,800	76,000	88,200	125,000	52,500	38,900	88,400	69,000	112,000	72,800
29	64,800	90,400	66,900	116,000	------	126,000	57,700	77,500	97,000	58,700	110,000	52,100
30	98,900	100,000	54,700	103,000	------	121,000	91,100	72,400	86,900	125,000	116,000	56,200
31	103,000	------	51,200	95,300	------	111,000	------	76,300	------	133,000	115,000	------
TOTAL	2,496.7M	2,494.1M	3,165.1M	2,883.8M	2,710.0M	3,137.9M	2,972.0M	2,451.0M	2,621.7M	3,285.1M	3,148.2M	2,139.6M
MEAN	80,540	83,140	102,100	93,030	96,790	101,200	99,070	79,060	87,390	106,000	101,600	71,320
MAX	107,000	106,000	174,000	135,000	136,000	127,000	133,000	101,000	118,000	152,000	140,000	105,000
MIN	42,800	62,200	38,000	52,800	63,500	65,100	52,500	38,900	44,100	56,200	41,300	38,100
AC-FT	4,952M	4,947M	6,278M	5,720M	5,375M	6,224M	5,895M	4,862M	5,200M	6,516M	6,244M	4,244M

CAL YR 1972 TOTAL 57,490,700 MEAN 157,100 MAX 430,000 MIN 38,000 AC-FT 114,000,000
WTR YR 1973 TOTAL 33,505,200 MEAN 91,800 MAX 174,000 MIN 38,000 AC-FT 66,460,000

13172500 Snake River near Murphy, Idaho

LOCATION.--Lat 43°17'31", long 116°25'12", in NW¼NE¼SE¼ sec.35, T.1 S., R.1 W., Ada County, on right bank 4.2 mi (6.8 km) downstream from Swan Falls powerplant, 7.5 mi (12.1 km) northeast of Murphy, and at mile 453.5 (729.7 km).

DRAINAGE AREA.--41,900 sq mi (108,500 sq km), approximately.

PERIOD OF RECORD.--August to October 1912, August 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,271.17 ft (692.253 m) above mean sea level. Prior to Sept. 7, 1914, nonrecording gage and Sept. 7, 1914, to Sept. 30, 1935, water-stage recorder at site 3.5 mi (5.6 km) upstream at datum 9.79 ft (2.984 m) higher.

AVERAGE DISCHARGE.--60 years, 10,940 cfs (309.8 cu m/s) 7,926,000 acre-ft/yr (9,770 cu hm/yr); 15-year base period (1952-67), 10,070 cfs (285.2 cu m/s).

EXTREMES.--Current year: Maximum discharge, 21,900 cfs (620 cu m/s) Oct. 20 (gage height, 8.25 ft or 2.515 m); maximum gage height, 8.42 ft (2.566 m); minimum discharge, 5,040 cfs (143 cu m/s) July 14 (gage height, 2.80 ft or 0.853 m); minimum daily, 5,910 cfs (167 cu m/s) July 6, 12.

Period of record: Maximum discharge, 47,300 (1,340 cu m/s) cfs June 22, 1918 (gage height, 13.95 ft or 4.242 m, site and datum then in use); minimum recorded, 3,900 cfs (110 cu m/s) July 9, 1949 (gage height, 2.53 ft or 0.771 m); minimum daily, 5,440 cfs (154 cu m/s) Aug. 4, 1914.

REMARKS.--Records good. Major regulation by American Falls Reservoir 260.5 mi (419.1 km) upstream (see sta 13076500). Diurnal fluctuation caused by hydroelectric plants upstream. Diversions above station for irrigation of about 2,590,000 acres (1,050,000 sq hm) of which about 701,000 acres (284,000 sq hm) are by withdrawals from ground water (1966 determination).

REVISIONS (WATER YEARS).--WSP 1737: 1933(M).

Rating table (gage height, in feet, and discharge, in cubic feet per second)
(Shifting-control method used Oct. 1 to Feb. 24)

3.0	5,560	8.0	20,400
4.0	8,240	10.0	27,300
6.0	13,900		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,200	19,000	13,900	18,100	17,600	17,700	11,300	11,600	7,440	6,060	6,720	7,060
2	12,100	18,200	16,800	18,300	16,600	18,200	12,200	12,600	7,430	6,170	6,740	7,380
3	11,100	18,700	19,500	17,200	15,300	19,200	14,000	9,600	7,430	6,150	6,660	8,700
4	11,700	19,100	19,400	17,400	15,400	16,700	13,200	9,400	7,450	6,110	6,830	8,050
5	12,000	19,000	18,900	17,100	15,400	17,800	13,200	9,130	7,390	6,060	6,800	8,300
6	12,700	18,700	18,000	14,200	16,500	18,500	12,800	9,060	7,420	5,910	6,830	8,580
7	14,800	17,900	17,500	13,700	16,600	17,800	13,800	7,320	7,170	5,920	6,700	8,010
8	17,400	18,100	15,400	16,800	16,500	17,400	14,600	7,920	7,420	5,930	6,650	7,790
9	18,200	19,000	16,800	18,000	18,100	16,800	13,300	8,160	7,200	5,940	6,730	7,490
10	18,300	18,500	17,600	14,600	19,000	17,300	14,400	7,580	7,230	5,920	6,730	7,880
11	19,100	17,100	17,400	15,200	19,000	15,800	14,300	7,930	6,750	5,920	6,640	8,150
12	18,600	16,800	17,800	15,900	19,000	15,500	15,000	7,700	6,700	5,910	6,540	7,550
13	18,700	17,800	17,500	16,700	18,900	15,500	14,400	7,840	6,670	5,960	6,460	8,110
14	17,700	18,900	17,000	18,300	18,400	15,600	16,200	7,690	6,710	6,020	6,270	8,090
15	19,200	19,100	16,300	18,600	17,300	15,900	15,900	7,970	6,830	6,200	6,540	7,820
16	19,900	18,800	16,100	17,200	16,400	15,900	18,700	7,820	7,670	6,070	6,410	7,990
17	19,300	18,600	16,200	16,900	16,900	16,900	20,600	7,520	8,370	6,210	6,200	8,890
18	19,600	18,600	15,500	19,400	16,700	16,000	19,000	7,780	8,320	6,150	6,200	8,200
19	19,600	18,600	16,400	19,800	15,500	17,000	18,500	7,320	7,940	6,150	6,320	8,420
20	21,100	18,500	16,100	19,400	15,200	16,300	13,700	7,800	7,730	6,250	6,610	8,550
21	20,300	18,800	17,600	19,000	15,300	15,900	15,300	7,860	7,350	6,690	6,710	8,860
22	20,200	18,300	17,800	18,600	15,300	15,400	14,900	8,280	7,200	6,870	6,680	8,620
23	19,400	17,800	18,000	19,100	15,500	15,600	14,700	7,910	6,640	7,170	6,740	8,640
24	19,400	17,400	20,300	19,200	15,400	15,500	14,400	7,510	6,740	7,130	6,830	10,100
25	18,900	17,100	20,500	17,100	15,400	15,500	14,000	7,790	6,780	7,360	6,560	9,910
26	16,600	17,300	19,800	16,200	16,000	14,400	10,900	7,740	6,600	7,030	6,840	9,500
27	12,300	18,000	19,700	17,400	16,700	14,400	10,300	7,460	6,500	6,990	7,200	10,300
28	10,900	16,800	19,400	16,200	17,300	12,200	10,500	8,070	6,210	6,800	7,330	9,290
29	13,000	18,100	18,800	15,600	------	12,100	10,500	7,350	6,050	6,820	7,090	8,470
30	16,400	17,500	19,700	15,300	------	11,500	12,200	7,410	6,070	6,830	6,860	9,460
31	17,400	------	18,500	14,800	------	10,900	------	7,470	------	6,760	7,100	------
TOTAL	517,100	546,100	550,200	531,300	467,200	491,200	426,800	254,590	213,410	197,460	207,520	254,160
MEAN	16,680	18,200	17,750	17,140	16,690	15,850	14,230	8,213	7,114	6,370	6,694	8,472
MAX	21,100	19,100	20,500	19,800	19,000	19,200	20,600	12,600	8,370	7,360	7,330	10,300
MIN	10,900	16,800	13,900	13,700	15,200	10,900	10,300	7,320	6,050	5,910	6,200	7,060
AC-FT	1,026M	1,083M	1,091M	1,054M	926,700	974,300	846,600	505,000	423,300	391,700	411,600	504,100

CAL YR 1972 TOTAL 5,977,300 MEAN 16,330 MAX 29,200 MIN 7,050 AC-FT 11,860,000
WTR YR 1973 TOTAL 4,657,040 MEAN 12,760 MAX 21,100 MIN 5,910 AC-FT 9,237,000

13181000 OWYHEE RIVER NEAR ROME, OREG.

LOCATION.--Lat 42°52'00", long 117°39'00", in SE¼NE¼ sec.14, T.31 S., R.41 E., Malheur County, on right bank 0.5 mi (0.8 km) downstream from Jordan Creek, 2.6 mi (4.2 km) north of Rome, and at mile 117.0 (188.3 km).

DRAINAGE AREA.--About 8,000 mi^2 (20,700 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,344.20 ft (1,019.312 m) above mean sea level. Prior to Feb. 10, 1960, at datum 0.24 ft (0.073 m) lower.

AVERAGE DISCHARGE.--24 years, 889 ft^3/s (25.2 m^3/s), 644,100 acre-ft/yr (794 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,270 ft^3/s (121 m^3/s) Apr. 7, gage height, 6.47 ft (1.972 m); minimum, 109 ft^3/s (3.09 m^3/s) Aug. 12.
Period of record: Maximum discharge, 33,500 ft^3/s (949 m^3/s) Dec. 24, 1964, gage height, 16.7 ft (5.09 m), from floodmark; minimum, 42 ft^3/s (1.19 m^3/s) Aug. 12, 1954, July 28, Aug. 5, 1961, July 31, 1968.

REMARKS.--Records excellent. Flow regulated by Antelope Reservoir, capacity, 70,000 acre-ft (86.3 hm^3), increased in 1970, and Wild Horse Reservoir, capacity, 32,690 acre-ft (40.3 hm^3), and numerous small reservoirs. Diversions above station for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	234	370	370	464	2.080	1.360	1.800	670	218	171	202
2	202	238	354	338	414	2.380	1.480	1.700	610	205	165	209
3	208	230	342	270	366	2.160	1.370	1.630	570	199	150	209
4	202	244	300	230	370	1.700	1.180	1.550	555	189	142	196
5	205	283	250	240	394	1.290	1.420	1.510	531	186	131	193
6	255	318	240	250	454	1.090	2.640	1.670	495	189	125	183
7	238	318	220	250	528	1.010	3.790	1.920	464	196	125	183
8	238	334	180	240	536	1.000	3.080	1.820	428	199	131	193
9	244	342	140	250	522	1.080	2.280	1.590	401	189	131	186
10	244	338	120	270	508	1.390	2.220	1.450	369	196	120	186
11	238	322	140	300	513	1.460	2.440	1.380	329	189	120	189
12	230	314	170	430	544	2.080	2.700	1.340	268	168	120	180
13	217	302	160	640	562	1.600	2.800	1.260	243	153	115	174
14	230	298	160	1.250	504	1.440	2.610	1.260	232	147	136	180
15	244	338	190	2.750	486	1,140	2.440	1.240	243	139	159	171
16	241	334	240	2.360	464	926	2.520	1.270	250	156	162	156
17	234	366	300	2.320	459	986	2.310	1.270	254	174	156	147
18	238	346	330	2.480	477	1.240	2.850	1.260	454	168	162	145
19	248	318	370	1.650	558	1.110	2.620	1.240	490	165	156	142
20	252	322	430	1.180	660	956	2.200	1.210	477	165	150	147
21	258	326	510	896	580	1.080	2.010	1.290	454	174	147	147
22	252	326	700	760	504	1.840	1.920	1.280	393	177	153	156
23	262	310	1.440	608	459	1.670	1.840	1.200	357	174	150	174
24	290	269	1.820	540	446	1.370	2.190	1.140	329	162	156	186
25	294	266	1.570	518	482	1.370	1.910	1.060	309	171	165	189
26	276	258	1.210	562	1.170	1.900	1.830	1.000	274	177	171	196
27	253	286	938	544	1,450	2.500	1.800	1.060	246	177	171	202
28	248	310	770	438	1.560	2.610	1.820	1.160	240	174	168	209
29	244	330	665	414	------	2.000	1.930	1.010	243	165	171	215
30	234	394	508	386	------	1.580	1.910	888	232	174	174	215
31	238	------	426	430	------	1.350	------	768	------	174	193	------
TOTAL	7,455	9.214	15.563	24.164	16.434	47.388	65.470	41.226	11.410	5.489	4.646	5.460
MEAN	240	307	502	779	587	1.529	2.182	1.330	380	177	150	182
MAX	294	394	1.820	2.750	1.560	2.610	3.790	1.920	670	218	193	215
MIN	193	230	120	230	366	926	1.180	768	232	139	115	142
AC-FT	14.790	18.280	30.870	47.930	32.600	93,990	129.900	81.770	22.630	10.890	9.220	10.830

CAL YR 1972 TOTAL 637.306 MEAN 1.741 MAX 21.900 MIN 113 AC-FT 1.264.000
WTR YR 1973 TOTAL 253.919 MEAN 696 MAX 3.790 MIN 115 AC-FT 503.600

PEAK DISCHARGE (BASE, 5,400 CFS).--No peak above base.

13182500 LAKE OWYHEE NEAR NYSSA, OREG.

LOCATION.--Lat 43°38'30", long 117°14'30", in NW¼SE¼ sec.20, T.22 S., R.45 E., Malheur County, near left abutment on Owyhee Dam on Owyhee River, 21 mi (33.8 km) southwest of Nyssa, and at mile 27.8 (44.7 km).

DRAINAGE AREA.--11,160 mi^2 (28,900 km^2), approximately.

PERIOD OF RECORD.--October 1932 to current year. Prior to October 1958, published as Owyhee Reservoir at Owyhee Dam, near Nyssa.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Oct. 1, 1965, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,123,000 acre-ft (1,380 hm^3) Apr. 19, elevation, 2,670.08 ft (813.840 m); minimum, 796,800 acre-ft (982 hm^3) Sept. 30, elevation, 2,640.98 ft (804.971 m).

Period of record: Maximum contents observed, 1,140,000 acre-ft (1,410 hm^3) Apr. 15, 1952, elevation, 2,671.50 ft (814.273 m); minimum observed since full capacity was attained on May 7, 1936, 437,000 acre-ft (539 hm^3) Oct. 1, 1961, elevation, 2,595.35 ft (791.063 m).

REMARKS.--Reservoir is formed by concrete arch-gravity dam, completed in September 1932; storage began Oct. 16, 1932. Capacity, 1,122,000 acre-ft (1,380 hm^3) between elevations 2,367.50 ft (721.614 m) bottom of sluice gates and 2,670.00 ft (813.816 m) top of spillway gate, 715,000 acre-ft (882 hm^3) between elevations 2,590.20 ft (789.493 m) diversion tunnel and 2,670.00 ft (813.816 m). Dead storage below elevation 2,367.50 ft (721.614 m) negligible. Figures given herein are contents above elevation 2,367.50 ft (721.614 m). Reservoir generally will not be drawn below elevation 2,590.2 ft (789.493 m) contents, 406,800 acre-ft (502 hm^3), which project considers dead storage. Water is released through diversion tunnel to South Canal for irrigation of lands west of Snake River in vicinity of Homedale, Idaho, and to North Canal for irrigation of lands north and west of Owyhee River, and through sluice gates to river for Owyhee Canal, which diverts about 18 mi (29 km) downstream.

COOPERATION.--Capacity tables furnished by U.S. Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,646.90	856,000	-
Oct. 31	2,647.02	857,200	+1,200
Nov. 30	2,649.27	880,600	+23,400
Dec. 31	2,652.91	919,700	+39,100
CAL YR 1972	-	-	-15,500
Jan. 31	2,657.72	973,400	+53,700
Feb. 28	2,660.83	1,009,000	+35,600
Mar. 31	2,668.78	1,106,000	+97,000
Apr. 30	2,669.91	1,121,000	+15,000
May 31	2,668.27	1,100,000	-21,000
June 30	2,662.57	1,030,000	-70,000
July 31	2,654.34	935,400	-94,600
Aug. 31	2,645.91	845,800	-89,600
Sept. 30	2,640.98	796,800	-49,000
WTR YR 1973	-	-	-59,200

13183000 OWYHEE RIVER BELOW OWYHEE DAM, OREG.

LOCATION.--Lat 43°39'17", long 117°15'16", in SE¼ sec.18, T.22 S., R.45 E., Malheur County, on left bank 0.8 mi (1.3 km) downstream from Owyhee Dam, 20 mi (32 km) southwest of Nyssa, and at mile 27.0 (43.4 km).

DRAINAGE AREA.--11,160 mi^2 (28,900 km^2), approximately.

PERIOD OF RECORD.--February 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,343.67 ft (714.351 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--41 years (1932-73), 340 ft^3/s (9.63 m^3/s), 246,300 acre-ft/yr (304 hm^3/yr), not adjusted for storage or diversion.

EXTREMES.--Current year: Maximum discharge, 3,170 ft^3/s (89.8 m^3/s) Apr. 14, gage height, 6.61 ft (2.015 m); minimum, 2.4 ft^3/s (0.068 m^3/s) Nov. 18, 19, gage height, 0.21 ft (0.064 m).

Period of record: Maximum discharge, 22,900 ft^3/s (649 m^3/s) Apr. 15, 1952, gage height, 15.70 ft (4.785 m); no flow for part of Aug. 8, 9, 1932, when temporary diversion tunnel at Owyhee Dam was closed.

REMARKS.--Records good. Flow regulated since October 1932 by Lake Owyhee (see station 13182500), and by many smaller reservoirs. Diversion of 475,600 acre-ft (586 hm^3) from Lake Owyhee during the year for irrigation of lands below station and outside the basin. Many smaller diversions for irrigation above station.

COOPERATION.--Water-stage recorder inspected by irrigation district employees.

REVISIONS (WATER YEARS).--WSP 983: 1941-42. WSP 1397: 1930, 1933, 1946.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBFR 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	2.8	2.7	3.0	6.8	8.5	7.8	247	175	158	155	148
2	61	2.7	2.7	3.0	6.8	8.5	7.8	247	172	158	158	148
3	61	2.7	3.1	3.0	6.8	8.5	8.5	208	172	158	158	148
4	61	2.8	2.8	3.0	7.0	8.2	9.8	180	172	158	158	148
5	61	2.6	2.7	3.0	7.0	8.5	10	180	172	158	160	136
6	61	2.6	2.7	3.0	7.0	8.2	753	182	172	158	152	132
7	61	2.6	2.7	3.0	7.0	8.2	2,510	182	172	158	145	132
8	61	2.6	2.7	3.0	7.0	8.2	2,970	182	172	160	145	132
9	61	2.6	2.7	3.0	7.2	8.5	2,310	182	172	155	145	132
10	61	2.6	2.7	3.0	7.5	8.5	1,450	182	172	158	148	132
11	61	2.6	2.7	3.1	7.8	8.8	1,150	168	142	158	148	126
12	61	2.6	2.7	3.2	8.0	8.5	1,150	158	116	158	145	120
13	29	2.6	2.7	3.2	8.2	8.5	1,420	158	116	158	130	120
14	4.5	2.6	2.7	3.1	8.2	8.2	1,990	158	112	158	132	112
15	3.9	2.6	2.7	2.7	8.0	8.2	2,080	178	102	158	132	110
16	3.6	2.6	2.7	2.7	7.8	7.8	1,770	185	98	158	134	110
17	3.4	2.6	2.7	2.7	7.8	7.5	983	185	98	160	134	110
18	3.3	2.5	2.7	2.7	8.0	7.5	635	185	98	160	134	112
19	3.3	3.0	2.7	2.6	7.8	7.8	1,340	185	98	160	134	112
20	3.2	2.6	2.7	2.6	7.8	8.0	1,760	185	100	160	130	112
21	3.1	2.6	2.7	2.6	8.0	8.0	1,740	185	110	160	122	112
22	3.0	2.6	3.1	4.5	8.0	7.5	1,190	185	128	160	120	116
23	3.0	2.6	3.2	6.4	8.0	7.5	512	185	136	160	120	116
24	3.0	2.5	3.2	6.6	7.8	7.8	286	182	136	155	120	106
25	3.0	2.5	3.1	6.8	7.8	8.0	629	175	136	150	120	98
26	2.8	2.6	3.1	6.8	7.8	8.0	865	175	152	150	120	100
27	2.8	2.6	3.1	6.8	8.0	8.0	865	175	160	152	122	92
28	2.8	2.7	3.1	7.0	8.2	8.0	459	175	160	152	124	86
29	2.8	2.7	3.0	7.0	------	8.0	244	175	158	152	145	86
30	2.8	2.7	3.0	6.8	------	8.0	244	175	158	152	145	86
31	2.8	------	3.1	6.8	------	8.0	------	175	------	155	145	------
TOTAL	818.1	79.0	88.2	126.7	213.1	251.4	31,348.9	5,679	4,237	4,865	4,280	3,530
MEAN	26.4	2.63	2.85	4.09	7.61	8.11	1,045	183	141	157	138	118
MAX	61	3.0	3.2	7.0	8.2	8.8	2,970	247	175	160	160	148
MIN	2.8	2.5	2.7	2.6	6.8	7.5	7.8	158	98	150	120	86
AC-FT	1,620	157	175	251	423	499	62,180	11,260	8,400	9,650	8,490	7,000
MEAN†	304	396	639	877	649	1,586	2,138	1,276	401	98.6	119	245
AC-FT†	18,710	23,560	39,280	53,950	36,020	97,500	127,200	78,480	23,890	6,060	7,310	14,570

CAL YR 1972 TOTAL 408,341.6 MEAN 1,116 MAX 11,200 MIN 2.5 AC-FT 809,900 MEAN† 1,725 AC-FT† 1,252,000
WTR YR 1973 TOTAL 55,516.4 MEAN 152 MAX 2,970 MIN 2.5 AC-FT 110,100 MEAN† 727 AC-FT† 526,500

13214000 MALHEUR RIVER NEAR DREWSEY, OREG.

LOCATION.--Lat 43°47'05", long 118°19'50", in NE¼SE¼ sec.31, T.20 S., R.36 E., Harney County, on left bank 300 ft (91 m) downstream from bridge on U.S. Highway 20, 0.5 mi (0.8 km) downstream from Cottonwood Creek, 3.0 mi (4.8 km) southeast of Drewsey, and at mile 126 (203 km).

DRAINAGE AREA.--910 mi^2 (2,360 km^2), approximately.

PERIOD OF RECORD.--June 1920 to September 1921, November, December 1921, March, April 1922, April to September 1923, June 1926 to current year. Monthly discharge only for some periods, published in WSP 1317. March to September 1914 at site 13 mi (21 km) upstream; records not equivalent owing to inflow from several creeks.

GAGE.--Water-stage recorder. Datum of gage is 3,479.13 ft (1,060.439 m) above mean sea level. Prior to Apr. 27, 1923, water-stage recorder or nonrecording gage at site 0.5 mi (0.8 km) downstream at different datum. Apr. 27, 1923, to June 6, 1939, water-stage recorder at site 7 mi (11 km) downstream at different datum.

AVERAGE DISCHARGE.--47 years (1926-73), 177 ft^3/s (5.01 m^3/s), 128,200 acre-ft/yr (158 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,120 ft^3/s (88.4 m^3/s) Jan. 16, gage height, 10.04 ft (3.060 m); minimum daily, 2.4 ft^3/s (0.068 m^3/s) Aug. 17-22.

Period of record: Maximum discharge, 12,000 ft^3/s (340 m^3/s) Dec. 23, 1964, gage height, 13.50 ft (4.115 m), from rating curve extended above 4,500 ft^3/s (127 m^3/s) on basis of contracted-opening measurement at gage height 13.20 ft (4.023 m); no flow at times.

REMARKS.--Records fair. Slight regulation by small reservoirs above station. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1093: 1927. WSP 1287: Drainage area. WSP 1397: 1921, 1927-31, 1937, drainage area (former site). WSP 1517: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	75	72	89	95	455	175	125	77	7.2	2.8	3.2
2	41	76	74	78	102	326	157	104	78	7.2	2.8	3.2
3	41	78	76	88	107	252	157	93	68	6.6	2.8	3.8
4	41	82	60	88	111	217	180	152	57	6.0	2.8	4.3
5	40	89	40	80	130	221	221	208	46	5.6	2.8	4.3
6	36	82	42	70	180	203	246	146	40	5.2	2.8	3.7
7	34	77	38	70	240	184	240	133	34	4.8	2.8	4.4
8	35	78	31	70	194	198	232	130	32	4.2	2.8	4.0
9	41	80	28	75	146	216	250	129	31	4.2	2.8	3.6
10	51	81	32	80	137	230	244	112	37	4.4	2.8	3.7
11	65	86	38	86	143	304	290	92	42	4.4	2.8	3.4
12	63	86	42	94	155	212	318	70	39	4.8	2.8	3.6
13	65	82	42	113	180	201	346	62	37	4.8	2.8	3.4
14	64	80	38	338	194	168	312	62	51	4.6	2.8	3.7
15	74	78	44	188	175	157	258	65	53	4.6	2.8	3.6
16	72	78	65	1.650	203	152	228	74	52	4.6	2.6	3.4
17	71	78	90	1.050	168	159	256	75	50	4.6	2.4	3.2
18	71	80	117	338	152	148	256	90	46	4.6	2.4	3.2
19	72	78	134	120	136	143	217	117	40	4.6	2.4	3.4
20	70	76	132	110	124	143	197	119	34	4.6	2.4	3.4
21	70	64	138	120	123	156	175	121	27	4.6	2.4	3.4
22	69	57	130	100	124	170	168	112	22	4.6	2.4	3.4
23	70	50	120	110	119	165	191	95	18	4.6	2.5	3.8
24	70	58	120	110	137	181	212	102	16	4.6	2.7	5.0
25	97	66	125	110	157	217	196	210	16	4.6	3.0	5.0
26	70	92	124	100	210	240	172	178	14	4.1	3.2	5.8
27	70	104	115	90	225	223	167	136	13	3.8	3.2	9.3
28	68	82	105	90	328	196	157	116	12	3.1	3.2	12
29	70	81	98	95	------	176	146	97	9.6	2.8	3.2	12
30	68	77	98	100	------	176	137	86	7.8	2.8	3.2	13
31	62	------	89	95	------	188	------	77	------	2.8	3.2	------
TOTAL	1.868	2.331	2.497	5.995	4.495	6.377	6.501	3.488	1.099.4	144.0	86.4	145.2
MEAN	60.3	77.7	80.5	193	161	206	217	113	36.6	4.65	2.79	4.84
MAX	97	104	138	1.650	328	455	346	210	78	7.2	3.2	13
MIN	34	50	28	70	95	143	137	62	7.8	2.8	2.4	3.2
AC-FT	3.710	4.620	4.950	11.890	8.920	12.650	12.890	6.920	2.180	286	171	288

CAL YR 1972 TOTAL 80.890.5 MEAN 221 MAX 1.820 MIN 5.2 AC-FT 160.400
WTR YR 1973 TOTAL 35.027.0 MEAN 96.0 MAX 1.650 MIN 2.4 AC-FT 69.480

PEAK DISCHARGE (BASE, 800 CFS).--Jan. 13 (2200) 1,250 cfs (7.14 ft); Jan. 16 (1930) 3,120 cfs (10.04 ft).

NOTE.--No gage-height record July 15 to Sept. 5.

13214500 WARMSPRINGS RESERVOIR NEAR RIVERSIDE, OREG.

LOCATION.--Lat 43°35'05", long 118°12'30", in SW¼ sec.8, T.23 S., R.37 E., Malheur County, on Bureau of Reclamation lands, near right end of dam on Malheur River, 3 mi (5 km) northwest of Riverside, 4 mi (6 km) upstream from South Fork, and at mile 108 (174 km).

DRAINAGE AREA.--1,100 mi^2 (2,850 km^2), approximately.

PERIOD OF RECORD.--January 1920 to October 1929, December 1929 to current year.

GAGE.--Water-stage recorder. Prior to May 29, 1964, nonrecording gage read daily or weekly. Datum of gage is 3,327.0 ft (1,014.07 m) above mean sea level (levels by Bureau of Reclamation); gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Current year: Maximum contents, 129,800 acre-ft (160 hm^3) Apr. 24, elevation, 3,391.47 ft (1,033.720 m); minimum, 827 acre-ft (1.02 hm^3) Sept. 14, elevation, 3,332.08 ft (1,015.618 m).

Period of record: Maximum contents, 196,100 acre-ft (242 hm^3) Apr. 16, May 13, 1958, elevation, 3,407.10 ft (1,038.484 m); no contents Sept. 18 to Nov. 1, 1929, Aug. 26 to sometime in November 1935, Sept. 18 to Oct. 11, 1950.

REMARKS.--Records good. Reservoir is formed by concrete-arch dam. Storage began in 1919. Capacity, 191,000 acre-ft (236 hm^3) between elevations 3,327.00 ft (1,014.070 m), bottom of outlet tunnel, and 3,406.00 ft (1,038.149 m), top of flashboards. Dead storage, 1,400 acre-ft (1.73 hm^3) below elevation 3,327.00 ft (1,014.070 m) not included in records. Water used to irrigate lands on both sides of river between Namorf and Ontario.

COOPERATION.--Data for computing capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	3,375.94	77,710	-
Oct. 31	3,375.82	77,340	-370
Nov. 30	3,377.41	82,270	+4,930
Dec. 31	3,379.40	88,580	+6,310
CAL YR 1972	-	-	-23,420
Jan. 31	-	a102,800	+14,220
Feb. 28	3,386.57	112,300	+9,500
Mar. 31	3,390.12	124,800	+12,500
Apr. 30	3,391.00	128,100	+3,300
May 31	3,385.23	107,800	-20,300
June 30	3,376.57	79,670	-28,130
July 31	3,364.32	45,200	-34,470
Aug. 31	3,346.15	11,650	-33,550
Sept.30	3,333.02	1,150	-10,500
WTR YR 1973	-	-	-76,560

a No gage-height record.

13215000 MALHEUR RIVER BELOW WARMSPRINGS RESERVOIR, NEAR RIVERSIDE, OREG.

LOCATION.--Lat 43°34'15", long 118°12'05", in SW¼ sec.17, T.23 S., R.37 E., Malheur County, on left bank 1.0 mi (1.6 km) downstream from Warmsprings Dam, 3.0 mi (4.8 km) upstream from South Fork, 4.0 mi (6.4 km) northwest of Riverside, and at mile 107 (172 km).

DRAINAGE AREA.--1,100 mi^2 (2,850 km^2), approximately.

PERIOD OF RECORD.--January 1906 to March 1907 and December 1908 (gage heights only), January 1909 to September 1910, December 1914 to July 1917, March 1919 to current year. Monthly discharge only for some periods, published in WSP 1317. Figures of discharge for January 1906 to March 1907, published in WSP 272 and 370, have been found to be unreliable and should not be used. Published as Middle Fork of Malheur River at Riverside 1906-7, as Middle Fork of Malheur River above South Fork, at Riverside 1909-10, as Malheur River above South Fork, at Riverside in WSP 370. 1906-10, and as Malheur River at Warmsprings reservoir site, near Riverside 1914-17.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,305 ft (1,007 m), by barometer. See WSP 1317 or 1737 for history of changes prior to Sept. 29, 1949.

AVERAGE DISCHARGE.--54 years (1919-73), 174 ft^3/s (4.93 m^3/s), 126.100 acre-ft/yr (155 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 577 ft^3/s (16.3 m^3/s) Aug. 19, gage height, 4.96 ft (1.512 m); no flow at times.
Period of record: Maximum discharge observed, 7,200 ft^3/s (204 m^3/s) Mar. 1, 1910, gage height, 10.7 ft (3.26 m), site and datum then in use, from rating curve extended above 820 ft^3/s (23.2 m^3/s): no flow at times.

REMARKS.--Records good except those below 50 ft^3/s (1.42 m^3/s), which are poor. Flow completely regulated since November 1919 by Warmsprings Reservoir (see station 13214500). Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 833: 1936. WSP 1063: 1942-45. WSP 1397: 1909-10, 1917. WSP 1447: 1955. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	.10	.10	.10	.10	.10	.10	352	356	572	492	456
2	174	.10	.10	.10	.10	.10	.10	366	361	572	496	464
3	158	.10	.10	.10	.10	.10	.10	379	366	554	496	482
4	158	.10	.10	.10	.10	.10	.10	388	402	550	492	474
5	144	.10	.10	.10	.10	.10	132	392	415	536	487	442
6	135	.10	.10	.10	.10	.10	166	388	438	532	496	415
7	135	.10	.10	.10	.10	.10	166	384	478	536	505	384
8	135	.10	.10	.10	.10	.10	166	384	505	536	514	352
9	112	.10	.10	.10	.10	.10	113	384	514	523	518	339
10	102	.10	.10	.10	.10	.10	83	384	514	510	518	356
11	87	.10	.10	.10	.10	.10	85	410	514	518	518	384
12	71	.10	.10	.10	.10	.10	85	415	514	523	523	227
13	26	.10	.10	.10	.10	.10	85	406	514	518	528	100
14	.10	.10	.10	.10	.10	.10	120	424	510	518	541	61
15	.10	.10	.10	.10	.10	.10	129	469	510	518	550	.10
16	.10	.10	.10	.10	.10	.10	147	474	510	510	554	.10
17	.10	.10	.10	.10	.10	.10	166	474	510	510	559	.10
18	.10	.10	.10	.10	.10	.10	182	487	492	510	559	.10
19	.10	.10	.10	.10	.10	.10	158	496	492	505	559	.10
20	.10	.10	.10	.10	.10	.10	129	500	500	500	568	.10
21	.10	.10	.10	.10	.10	.10	129	500	505	482	568	.10
22	.10	.10	.10	.10	.10	.10	129	500	510	474	564	.10
23	.10	.10	.10	.10	.10	.10	132	500	518	464	559	.10
24	.10	.10	.10	.10	.10	.10	162	500	518	456	564	.10
25	.10	.10	.10	.10	.10	.10	199	474	518	474	564	.10
26	.10	.10	.10	.10	.10	.10	240	438	505	478	559	.10
27	.10	.10	.10	.10	.10	.10	280	410	496	500	550	.10
28	.10	.10	.10	.10	.10	.10	320	406	496	510	536	.10
29	.10	.10	.10	.10	------	.10	334	397	514	505	518	.10
30	.10	.10	.10	.10	------	.10	338	370	559	505	496	.10
31	.10	------	.10	.10	------	.10	------	348	------	496	474	------
TOTAL	1.646.80	3.00	3.10	3.10	2.80	3.10	4.375.40	13.199	14.554	15.895	16.425	4.936.60
MEAN	53.1	.10	.10	.10	.10	.10	146	426	485	513	530	165
MAX	208	.10	.10	.10	.10	.10	338	500	559	572	568	482
MIN	.10	.10	.10	.10	.10	.10	.10	348	356	456	474	.10
AC-FT	3.270	6.0	6.1	6.1	5.6	6.1	8.680	26.180	28.870	31.530	32.580	9.790

CAL YR 1972 TOTAL 94.544.30 MEAN 258 MAX 940 MIN .10 AC-FT 187.500
WTR YR 1973 TOTAL 71.046.90 MEAN 195 MAX 572 MIN .10 AC-FT 140.900

NOTE.--No gage-height record Oct. 14 to Apr. 4.

13216500 NORTH FORK MALHEUR RIVER ABOVE BEULAH RESERVOIR, NEAR BEULAH, OREG.

LOCATION.--Lat 43°57'01", long 118°10'28", in NW¼NE¼ sec.4, T.19 S., R.37 E., Malheur County, on left bank 500 ft (152 m) upstream from Beulah Reservoir, 2.5 mi (4.0 km) upstream from Warm Springs Creek, 3.5 mi (5.6 km) northwest of Beulah, and at mile 18.0 (29.0 km).

DRAINAGE AREA.--355 mi^2 (919 km^2).

PERIOD OF RECORD.--January to September 1914 (published as "at Scott's Ranch, near Beulah"), Jun. 1936 to current year. Published as "above Agency Valley Reservoir, near Beulah", June 1936 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 3,351 ft (1,021.4 m) above mean sea level. Jan. 1 to Sept. 30, 1914, nonrecording gage and June 10, 1936, to Oct. 14, 1958, water-stage recorder at site 0.5 mi (0.8 km) upstream at different datums.

AVERAGE DISCHARGE.--37 years (1936-73), 127 ft^3/s (3.60 m^3/s), 92,010 acre-ft/yr (113 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Jan. 16; maximum gage height, 4.64 ft (1.414 m) Jan. 16, ice jam; minimum daily discharge, 22 ft^3/s (0.62 m^3/s) Dec. 4-12.

Period of record: Maximum discharge, 3,970 ft^3/s (112 m^3/s) Dec. 23, 1964, gage height, 8.30 ft (2.530 m), from floodmark, from rating curve extended above 1,300 ft^3/s (36.8 m^3/s) on basis of slope-area measurement of peak flow; maximum gage height, 9.4 ft (2.87 m) sometime during period Dec. 17-23, 1964 (ice jam); minimum discharge, 8.5 ft^3/s (0.24 m^3/s) Dec. 13, 1967, result of freezeup.

REMARKS.--Records good below 200 ft^3/s (5.66 ft^3/s), fair above. No regulation. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1934: 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	64	40	60	75	168	102	145	100	43	28	31
2	57	62	28	55	64	118	98	140	96	43	31	36
3	56	62	23	52	66	105	102	152	94	40	36	37
4	54	81	22	50	67	120	118	202	92	38	29	36
5	54	71	22	46	88	105	142	196	86	39	35	36
6	53	62	22	42	86	100	152	172	84	40	32	32
7	54	60	22	37	84	108	140	165	80	39	29	33
8	54	64	22	33	70	115	140	162	78	38	27	35
9	56	60	22	32	67	120	152	158	77	38	28	37
10	59	64	22	32	74	135	155	152	77	36	33	33
11	64	71	22	35	74	120	170	145	74	30	36	34
12	64	66	22	72	64	96	205	142	72	29	36	36
13	62	64	24	176	74	98	208	132	70	34	36	35
14	59	62	30	130	72	86	199	135	74	36	34	36
15	59	62	50	90	78	92	190	140	69	36	30	36
16	59	62	70	400	78	98	178	148	67	36	34	37
17	59	60	110	219	75	105	184	155	69	34	36	35
18	59	60	140	125	67	90	162	165	70	34	37	36
19	59	60	160	80	55	96	152	168	64	34	37	39
20	59	49	200	63	52	94	142	162	59	38	35	51
21	57	45	250	52	51	120	138	158	56	102	34	47
22	57	41	280	47	51	120	145	148	54	42	32	43
23	57	41	240	47	52	118	148	140	55	39	31	44
24	56	44	170	47	54	138	148	150	56	38	32	47
25	56	59	90	50	75	150	150	170	50	37	38	51
26	57	85	74	52	92	150	152	148	46	36	42	47
27	56	68	70	55	108	135	165	135	47	30	38	42
28	57	59	66	61	140	118	165	125	47	31	31	41
29	57	53	59	72	------	110	160	118	46	31	29	40
30	44	50	48	74	------	110	152	110	44	33	29	39
31	54	------	58	74	------	115	------	108	------	31	31	------
TOTAL	1.765	1.8[illegible]	2.478	2.460	2.053	3.553	4.614	4.646	2.053	1.185	1.026	1.167
MEAN	56.9	60.4	79.9	79.4	73.3	115	154	150	68.4	38.2	33.1	38.9
MAX	64	85	280	400	140	168	208	202	100	102	42	51
MIN	44	41	22	32	51	86	98	108	44	29	27	31
AC-FT	3.500	3.590	4.920	4.880	4 070	7.050	9.150	9.220	4.070	2.350	2.040	2.310

CAL YR 1972 TOTAL 53.730 MEAN 147 MAX 628 MIN 22 AC-FT 106.600
WTR YR 1973 TOTAL 28.811 MEAN 78.9 MAX 400 MIN 22 AC-FT 57.150

PEAK DISCHARGE (BASE, 500 CFS).--Jan. 16 (1600) 1,080 cfs (3.82 ft); July 21 (0030) 604 cfs (2.81 ft).

13217000 BEULAH RESERVOIR AT BEULAH, OREG.

LOCATION.--Lat 43°54'41", long 118°09'25", in SW¼SE¼ sec.15, T.19 S., R.37 E., Malheur County, in control house at dam on North Fork Malheur River, 0.2 mi (0.3 km) northwest of Beulah, and at mile 14.8 (23.8 km).

DRAINAGE AREA.--440 mi^2 (1,140 km^2), approximately.

PERIOD OF RECORD.--December 1935 to current year. Prior to October 1968, published as Agency Valley Reservoir at Beulah.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 44,040 acre-ft (54.3 hm^3) Apr. 6, elevation, 3,330.95 ft (1,015.274 m); minimum, not determined.

Period of record: Maximum contents observed, 62,770 acre-ft (77.4 hm^3) May 3, 1941, elevation, 3,341.50 ft (1,018.489 m); no contents Sept. 17 to Oct. 13, 1950, Aug. 28 to Oct. 4, 1955, Aug. 13 to Oct. 1, 1961, Sept. 21 to Oct. 5, 1968.

REMARKS.--Records good. Reservoir is formed by earthfill, rock-faced dam. Storage began December 1935. Capacity, 59,920 acre-ft (73.9 hm^3) between elevations 3,263.21 ft (994.626 m), bottom of outlet tunnel, and 3,340.0 ft (1,018.03 m), top of spillway gates; with gates open the capacity is 32,220 acre-ft (39.7 hm^3). No dead storage. Water is used for irrigation of lands below Juntura, on Vale project of Bureau of Reclamation.

COPPERATION.--Daily elevations furnished by Vale-Oregon Irrigation District, and capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 1397: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,307.73	14,800	-
Oct. 31	-	a15,880	+1,080
Nov. 30	3,312.63	19,630	+3,750
Dec. 31	3,316.11	23,510	+3,880
CAL YR 1972	-	-	-2,090
Jan. 31	3,321.65	30,400	+6,890
Feb. 28	3,325.13	35,210	+4,810
Mar. 31	3,330.20	42,850	+7,640
Apr. 30	3,326.73	37,560	-5,290
May 31	3,323.85	33,400	-4,160
June 30	3,318.32	26,170	-7,230
July 31	3,304.09	11,810	-14,360
Aug. 31	3,284.70	1,940	-9,870
Sept. 30	-	a330	-1,610
WTR YR 1973	-	-	-14,470

a No gage-height record.

13217500 NORTH FORK MALHEUR RIVER AT BEULAH, OREG.

LOCATION.--Lat 43°54'28", long 118°09'08", in NW¼NE¼ sec.22, T.19 S., R.37 E., Malheur County, on left bank at Beulah, 0.3 mi (0.5 km) downstream from Agency Valley Dam, 12 mi (19 km) northwest of Juntura, and at mile 14.5 (23.3 km).

DRAINAGE AREA.--440 mi² (1,140 km²), approximately.

PERIOD OF RECORD.--June 1926 to current year. Published as "near Beulah" June 1926 to September 1935.

GAGE.--Water-stage recorder. Datum of gage is 3,261.20 ft (994.014 m) above mean sea level. Prior to Apr. 25, 1926, water-stage recorder at site 1 mi (2 km) downstream at different datum. Apr. 25, 1936, to Sept. 30, 1949, nonrecording gage at site 20 ft (6 m) downstream at datum 1.0 ft (0.3 m) higher. Oct. 1, 1949, to June 30, 1964, at present site at datum 1.0 ft (0.3 m) higher.

AVERAGE DISCHARGE.--38 years (1935-73), 138 ft³/s (3.91 m³/s), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 402 ft³/s (11.4 m³/s) Apr. 25, gage height, 2.89 ft (0.881 m); no flow Sept. 28-30.
Period of record: Maximum discharge, 7,000 ft³/s (198 m³/s) May 7, 1942, gage height, 8.4 ft (2.56 m) from floodmark, caused by failure of gates at Agency Valley Dam, from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of computation of peak flow over dam; no flow at times.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s), fair below. Flow regulated since 1935 by Beulah Reservoir (see station 13217000). Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1397: 1927-32, 1934, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	.20	.20	.20	.20	.30	.30	375	156	288	280	134
2	102	.20	.20	.20	.20	.30	.40	355	156	288	278	134
3	102	.20	.20	.20	.20	.30	.60	337	158	288	275	136
4	102	.30	.20	.10	.20	.30	1.9	308	160	285	240	142
5	102	.30	.20	.10	.20	.30	110	265	174	285	235	140
6	101	.20	.20	.20	.20	.30	192	232	182	285	238	132
7	101	.20	.20	.30	.20	.30	202	228	188	302	222	128
8	101	.20	.20	.30	.20	.30	204	215	188	310	218	125
9	101	.20	.20	.30	.20	.30	202	202	178	308	235	110
10	101	.20	.20	.40	.20	.30	182	202	172	308	228	107
11	101	.20	.20	.40	.20	.30	152	202	158	305	202	82
12	101	.20	.30	.40	.20	.30	180	202	160	305	198	35
13	38	.20	.30	.30	.20	.30	238	202	158	302	202	30
14	.10	.20	.20	.20	.20	.30	290	212	156	298	202	32
15	.20	.20	.20	.20	.20	.30	300	220	156	292	212	33
16	.20	.20	.20	.30	.20	.30	325	220	162	270	218	35
17	.20	.20	.20	.20	.30	.30	339	230	166	258	190	34
18	.10	.20	.20	.20	.30	.30	347	240	166	290	180	34
19	.20	.20	.20	.20	.30	.30	347	242	166	302	180	38
20	.10	.20	.10	.20	.30	.30	347	242	186	292	168	48
21	.10	.10	.10	.20	.30	.30	345	222	218	270	160	47
22	.10	.10	.20	.20	.30	.30	358	208	242	258	176	45
23	.20	.10	.20	.20	.30	.30	378	208	252	245	180	46
24	.20	.10	.20	.20	.30	.30	385	210	252	238	180	48
25	.20	.10	.10	.20	.30	.30	398	202	250	238	168	52
26	.20	.10	.10	.20	.30	.30	400	186	248	235	164	34
27	.20	.10	.20	.20	.30	.30	400	174	248	255	164	.10
28	.20	.10	.20	.20	.30	.30	400	162	278	275	154	0
29	.20	.10	.20	.20	------	.30	398	158	290	285	142	0
30	.20	.20	.20	.20	------	.30	395	156	290	285	138	0
31	.20	------	.20	.20	------	.30	------	156	------	280	136	------
TOTAL	1,258.10	5.30	6.00	7.10	6.80	9.30	7,817.20	6,973	5,914	8,725	6,163	1,961.10
MEAN	40.6	.18	.19	.23	.24	.30	261	225	197	281	199	65.4
MAX	102	.30	.30	.40	.30	.30	400	375	290	310	280	142
MIN	.10	.10	.10	.10	.20	.30	.30	156	156	235	136	0
AC-FT	2,500	11	12	14	13	18	15,510	13,830	11,730	17,310	12,220	3,890

CAL YR 1972 TOTAL 58,054.30 MEAN 159 MAX 484 MIN .10 AC-FT 115,200
WTR YR 1973 TOTAL 38,845.90 MEAN 106 MAX 400 MIN 0 AC-FT 77,050

13220000 MALHEUR RIVER AT LITTLE VALLEY, NEAR HOPE, OREG.

LOCATION.--Lat 43°53'58", long 117°30'25", in SE¼SE¼ sec.24, T.19 S., R.42 E., Malheur County, on right bank 500 ft (152 m) downstream from highway bridge at Little Valley, 8 mi (13 km) southwest of Hope, 14 mi (23 km) southwest of Vale, and at mile 34.0 (54.7 km).

DRAINAGE AREA.--3,010 mi^2 (7,800 km^2), approximately.

PERIOD OF RECORD.--April 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,424.03 ft (738.844 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 195 ft^3/s (5.52 m^3/s), 141,300 acre-ft/yr (174 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft^3/s (51.5 m^3/s) Jan. 16, gage height, 5.32 ft (1.622 m); minimum daily, 17 ft^3/s (0.48 m^3/s) Dec. 9.

Period of record: Maximum discharge, 12,300 ft^3/s (348 m^3/s) Feb. 24, 1957, gage height, 11.5 ft (3.51 m), from floodmark, from rating curve extended above 5,500 ft^3/s (156 m^3/s) on basis of slope-area measurement of peak flow; minimum, 6.8 ft^3/s (0.19 m^3/s) Jan. 16, 1972.

The two greatest floods occurred in March 1894 and March 1910, on basis of records for former station near Namorf.

REMARKS.--Records good. Flow regulated by Warmsprings and Beulah Reservoirs (see stations 13214500 and 13217000). Vale-Oregon Canal diverted 155,600 acre-ft (192 hm^3) above station at Namorf in sec.31, T.20 S., R.41 E., for supplying Bully Creek Reservoir and for irrigation. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1217: 1949(M), 1950(M). WSP 1397; 1950. WSP 1737: 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	54	41	49	64	119	20	166	119	216	192	154
2	85	51	41	48	66	119	19	163	122	230	189	149
3	87	51	43	47	64	124	18	166	127	230	195	119
4	74	51	30	47	73	117	18	189	130	216	216	132
5	78	54	25	44	73	102	18	182	140	209	202	140
6	85	54	23	40	83	93	18	156	152	206	202	130
7	74	51	20	39	114	91	112	143	160	209	195	112
8	71	58	18	39	143	87	172	135	172	220	176	105
9	71	58	17	41	122	85	189	127	182	223	169	100
10	85	56	19	44	109	53	195	109	186	223	189	109
11	90	56	22	50	102	81	166	107	176	212	186	132
12	78	56	22	65	93	87	124	117	160	234	157	172
13	76	54	22	100	93	61	96	135	166	230	146	154
14	71	54	22	408	107	27	109	119	166	230	157	143
15	65	51	27	252	124	26	122	119	146	245	169	143
16	41	51	35	648	122	26	152	143	140	256	176	137
17	49	51	50	982	135	26	163	137	154	223	186	105
18	54	51	60	395	130	24	192	143	166	202	172	91
19	54	51	73	200	119	24	199	146	160	226	176	81
20	51	49	73	140	105	23	176	163	140	248	179	79
21	49	47	73	85	93	24	124	152	157	264	166	75
22	49	47	70	75	85	23	105	146	169	226	157	75
23	49	47	68	80	81	24	117	149	179	206	157	77
24	67	45	68	85	79	21	107	157	192	192	163	77
25	58	45	68	85	77	21	98	206	199	192	192	77
26	51	43	64	75	75	21	109	179	192	192	195	73
27	49	43	60	65	87	20	117	154	186	166	186	73
28	47	43	58	60	112	20	140	149	163	179	186	73
29	47	43	55	60	------	20	160	160	163	206	182	68
30	49	43	52	60	------	20	163	149	182	199	186	57
31	56	------	50	60	------	20	------	130	------	202	172	------
TOTAL	1,990	1,508	1,369	4,468	2,730	1,629	3,518	4,596	4,846	6,712	5,571	3,212
MEAN	64.2	50.3	44.2	144	97.5	52.5	117	148	162	217	180	107
MAX	90	58	73	982	143	124	199	206	199	264	216	172
MIN	41	43	17	39	64	20	18	107	119	166	146	57
AC-FT	3,950	2,990	2,720	8,860	5,410	3,230	6,980	9,110	9,610	13,310	11,050	6,370

CAL YR 1972 TOTAL 89,488 MEAN 245 MAX 2,480 MIN 17 AC-FT 177,500
WTR YR 1973 TOTAL 42,147 MEAN 115 MAX 982 MIN 17 AC-FT 83,600

13226500 BULLY CREEK AT WARMSPRINGS, NEAR VALE, OREG.

LOCATION.--Lat 44°01'10", long 117°27'35", in SE¼NW¼ sec.9, T.18 S., R.43 E., Malheur County, on left bank 400 ft (122 m) downstream from Cottonwood Creek, 2.7 mi (4.3 km) upstream from Bully Creek Dam, 11.4 mi (18.3 km) northwest of Vale, and at mile 14.7 (23.7 km).

DRAINAGE AREA.--539 mi^2 (1,396 km^2).

PERIOD OF RECORD.--September 1903 to February 1904, February 1905 to March 1907, February 1910, January 1911 to May 1917, March 1922 to June 1923, October 1963 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "near Vale" 1903, 1907, and as "above Vale" 1904-6, 1910.

GAGE.--Water-stage recorder. Datum of gage is 2,527.21 ft (770.294 m) above mean sea level (Bureau of Reclamation bench mark). Prior to July 1, 1923, nonrecording gages within 0.5 mi (0.8 km) downstream at different datums.

AVERAGE DISCHARGE.--16 years (1905-6, 1911-16, 1963-73), 42.8 ft^3/s (1.21 m^3/s), 31,010 acre-ft/yr (38.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,990 ft^3/s (84.7 m^3/s) Jan. 16, gage height, 4.82 ft (1.469 m); minimum, 0.20 ft^3/s (0.006 m^3/s) July 20.

Period of record: Maximum discharge, 12,800 ft^3/s (362 m^3/s) Dec. 22, 1964, gage height, 8.68 ft (2.646 m), from rating curve extended above 200 ft^3/s (5.66 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records good except those for winter periods, which are fair. No regulation. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1317: Drainage area (former site). WSP 1397: 1904-6, 1911, 1914, 1915

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.9	7.2	9.2	13	175	11	1.5	2.7	1.7	1.7	1.0
2	1.9	1.9	7.0	8.8	13	142	10	1.1	2.7	3.0	.80	1.0
3	1.9	1.9	6.6	8.4	14	103	10	1.1	2.4	1.5	.80	1.0
4	1.9	2.7	5.8	8.0	17	90	10	1.7	3.0	1.3	.70	1.0
5	1.7	3.6	4.8	7.6	38	86	9.6	3.6	3.0	1.7	1.0	1.0
6	1.7	3.6	4.2	7.2	52	77	9.0	4.2	3.0	1.5	1.0	1.1
7	1.7	3.9	3.6	7.2	64	74	8.5	2.7	5.3	1.5	.80	1.3
8	1.5	5.3	3.3	7.2	62	72	6.1	1.7	5.7	1.7	1.3	1.3
9	1.5	4.9	3.2	7.4	60	72	5.7	1.3	6.5	1.7	2.4	1.3
10	1.7	4.9	3.3	7.8	54	72	6.1	1.3	7.0	1.7	2.4	1.3
11	1.7	4.9	3.8	9.0	51	86	5.3	1.1	7.0	1.0	2.4	1.3
12	1.7	4.5	4.0	11	47	74	6.1	1.3	4.9	1.0	1.7	1.3
13	1.7	4.2	4.0	14	55	64	6.5	1.7	5.3	3.3	1.3	1.3
14	2.2	4.9	4.2	20	97	58	4.9	2.2	2.7	3.6	1.5	1.3
15	1.9	4.9	4.8	32	68	51	6.5	1.5	2.2	2.7	1.1	1.3
16	1.9	4.9	6.5	1.000	75	43	9.6	1.9	1.7	1.9	1.0	1.5
17	2.2	5.7	8.2	506	72	38	9.6	2.7	1.9	1.0	.70	1.5
18	2.4	5.7	10	193	66	28	8.5	2.4	1.9	.60	.60	1.7
19	2.7	8.0	11	70	60	25	5.7	2.4	2.4	.60	.60	2.2
20	3.0	7.5	12	70	55	24	5.3	1.7	2.7	.80	.60	2.2
21	3.3	7.5	13	30	54	24	5.7	1.1	1.9	1.5	.60	1.9
22	3.3	7.0	13	25	54	22	6.5	1.9	1.7	1.3	.50	1.9
23	3.3	7.0	13	23	50	19	6.5	3.3	1.9	1.1	.50	1.9
24	3.6	7.5	12	25	52	18	5.3	4.2	2.2	1.0	.50	2.4
25	3.9	7.8	12	26	52	17	2.7	5.7	2.2	1.1	.60	2.4
26	3.9	8.0	12	25	62	17	3.0	4.9	2.4	1.0	.70	2.2
27	3.6	8.0	11	18	84	15	3.6	4.2	2.4	.80	.70	1.9
28	3.6	7.8	11	14	135	15	3.6	5.7	1.7	.80	.70	1.9
29	3.0	7.6	10	13	------	14	2.7	5.7	1.7	1.1	.70	1.9
30	2.7	7.5	10	13	------	14	2.4	3.9	1.9	1.3	.80	1.9
31	1.9	------	9.6	13	------	14	------	2.4	------	1.9	.80	------
TOTAL	74.9	165.5	244.1	2.228.8	1.576	1.643	196.0	82.1	94.0	46.70	31.50	47.2
MEAN	2.42	5.52	7.87	71.9	56.3	53.0	6.53	2.65	3.13	1.51	1.02	1.57
MAX	3.9	8.0	13	1.000	135	175	11	5.7	7.0	3.6	2.4	2.4
MIN	1.5	1.9	3.2	7.2	13	14	2.4	1.1	1.7	.60	.50	1.0
AC-FT	149	328	484	4.420	3.130	3.260	389	163	186	93	62	94

CAL YR 1972 TOTAL 10.376.80 MEAN 28.4 MAX 482 MIN .30 AC-FT 20.580
WTR YR 1973 TOTAL 6.429.80 MEAN 17.6 MAX 1.000 MIN .50 AC-FT 12.750

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
1-16	1650	4.82	2,990	3- 1	0630	2.19	259
2-14	0030	1.87	175				

13226800 BULLY CREEK RESERVOIR NEAR VALE, OREG.

LOCATION.--Lat 44°00'50", long 117°23'45", in SE¼SW¼ sec.12, T.18 S., R.43 E., Malheur County, U.S. Bureau of Reclamation land, in control chamber at dam on Bully Creek, 8.0 mi (12.9 km) northwest of Vale, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--547 mi² (1,417 km²).

PERIOD OF RECORD.--February 1963 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 21,030 acre-ft (25.9 hm³) Apr. 12, elevation, 2,506.10 ft (763.859 m); no usable contents Sept. 14-30.

Period of record: Maximum contents not determined, occurred during period Apr. 4 to May 2, 1969, elevation, above 2,516.00 ft (766.877 m), spillway crest; no usable contents Sept. 14-30, 1973.

REMARKS.--Records fair. Reservoir is formed by earthfill, rock-faced dam. Storage began Feb. 1, 1963. Capacity, 29,980 acre-ft (37.0 hm³) between elevations 2,456.58 ft (748.766 m), outlet works, and 2,516.00 ft (766.877 m), spillway crest. Dead storage, 1,650 acre-ft (2.03 hm³) below elevation 2,456.58 ft (748.766 m). Figures given herein do not include dead storage. Water used for irrigation lands of Vale-Oregon Irrigation District. Bully Creek Reservoir feed canal diverts from Malheur River by way of Vale Oregon canal (see station 13220000).

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	2,477.90	4,700	-
Oct. 31	2,477.10	4,430	-270
Nov. 30	2,478.40	4,870	+440
Dec. 31	2,480.50	5,610	+740
CAL YR 1972	-	-	-1,340
Jan. 31	2,493.20	11,790	+6,180
Feb. 28	2,497.50	14,540	+2,750
Mar. 31	-	a19,750	+5,210
Apr. 30	2,504.65	19,840	+90
May 31	-	a15,560	-4,280
June 30	2,491.05	10,520	-5,040
July 31	2,478.20	4,800	-5,720
Aug. 31	2,465.20	1,350	-3,450
Sept.30	-	0	-1,350
WTR YR 1973	-	-	-4,700

† Hour of gage reading not reported.

a Interpolated.

13269000 Snake River at Weiser, Idaho

LOCATION.--Lat 44°14'44", long 116°58'48", in NW¼SE¼ sec.31, T.11 N., R.5 W., Washington County, on right bank at upstream side of U.S. Highway 30N bridge at Weiser, 0.7 mi (1.1 km) downstream from Weiser River, and at mile 351.3 (565.2 km).

DRAINAGE AREA.--69,200 sq mi (179,230 sq km), approximately. Mean altitude, 5,400 ft (1,646 m).

PERIOD OF RECORD.--October 1910 to current year. Fragmentary gage-height record obtained by U.S. Weather Bureau since 1895. Monthly discharge only for October 1910, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,086.64 ft (636.008 m) above mean sea level. Prior to Oct. 1, 1914, nonrecording gage 0.2 mi (0.3 km) downstream at different datum. Oct. 1, 1914, to Oct. 11, 1933, nonrecording gage, and Oct. 12, 1933, to Apr. 13, 1964, water-stage recorder, at site 0.3 mi (0.5 km) upstream at same datum.

AVERAGE DISCHARGE.--63 years, 17,990 cfs (509 cu m/s), 13,030,000 acre-ft/yr (16,070 cu hm/yr); 15-year base period (1952-67), 16,720 cfs (4,735 cu m/s).

EXTREMES.--Current year: Maximum discharge, 28,500 cfs (807 cu m/s) Apr. 18 (gage height, 6.28 ft or 1.914 m); maximum gage height, 15.55 ft (4.740 m) Dec. 20 (backwater from ice); minimum, 8,580 cfs (243 cu m/s) July 7, 8, 11, 12, 13 (gage height, 2.22 ft or 0.677 m).

Period of record: Maximum discharge, 84,500 cfs (2,390 cu m/s) Apr. 29, 1952 (gage height, 14.67 ft or 4.471 m, site and datum then in use); minimum observed, 5,100 cfs (144 cu m/s) Aug. 5, 1924 (gage height, 1.35 ft or 0.411 m, site and datum then in use).

Flood of Mar. 3, 1910, reached a stage of 17.1 ft (5.21 m) at site and datum 0.3 mi (0.5 km) upstream, from reading on old U.S. Weather Bureau gage (discharge, 120,000 cfs or 3,398 cu m/s). Flood in June 1894 was considerably higher.

REMARKS.--Records excellent. Flow regulated by many reservoirs above station. Diurnal fluctuation caused by hydroelectric plants upstream. Diversions above station for irrigation of about 3,650,000 acres (1,477,200 sq hm) of which about 742,000 acres (300,300 sq hm) are by withdrawals from ground water. In addition, approximately 7,300 acres (2,954 sq hm) are irrigated below station by diversion from Weiser River (1966 determination). Records of water temperatures and chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1317: 1918. WSP 1567: 1910(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,400	20,200	20,300	23,000	18,300	24,200	14,900	15,700	13,200	8,830	9,850	11,400
2	16,400	21,100	17,600	22,100	19,600	25,700	14,800	15,300	12,900	9,050	9,740	11,800
3	16,700	20,600	18,100	22,500	19,900	24,200	15,400	16,100	12,800	9,060	9,790	12,300
4	16,000	22,000	18,800	21,100	18,700	23,900	17,400	14,200	12,400	8,960	9,920	13,500
5	16,400	22,400	20,900	21,000	19,300	22,400	17,100	14,300	11,800	8,990	10,300	13,100
6	16,900	22,700	21,100	21,000	20,000	22,500	17,700	14,300	11,300	9,000	10,400	13,000
7	17,500	22,700	20,300	19,000	20,700	22,900	18,100	14,300	11,200	8,810	10,200	13,300
8	19,100	22,200	19,700	17,900	20,700	22,300	20,500	14,600	11,000	8,760	9,960	12,900
9	21,200	20,800	17,600	19,200	20,600	21,600	21,900	14,800	11,400	8,880	9,890	13,000
10	23,000	22,200	18,100	21,600	21,400	21,100	19,900	13,600	11,300	8,910	9,830	12,600
11	23,100	23,400	19,000	19,500	21,500	22,600	19,500	11,900	11,500	8,690	9,840	12,800
12	23,800	20,600	19,000	19,000	22,200	20,900	19,500	11,800	10,600	8,620	9,790	13,000
13	23,800	19,000	18,500	20,200	22,600	19,900	20,400	11,500	10,000	8,630	9,970	12,300
14	23,400	20,300	18,000	22,700	22,800	19,500	21,200	12,200	9,760	9,020	9,680	12,800
15	22,300	21,200	17,800	23,800	22,100	19,400	24,000	12,500	10,500	9,460	9,270	12,900
16	23,200	21,800	17,700	26,000	21,000	19,500	23,700	12,900	11,400	9,520	9,490	12,600
17	23,900	22,500	18,000	35,500	20,000	19,400	25,900	13,600	11,700	9,230	9,470	13,100
18	23,000	21,500	18,500	27,200	20,900	20,400	27,300	14,000	12,700	9,080	9,490	13,800
19	22,900	21,900	19,000	26,400	20,200	19,900	25,000	14,800	12,300	9,130	9,570	13,400
20	23,100	22,100	20,000	25,200	19,300	20,400	24,600	15,000	11,600	9,420	10,000	13,700
21	24,000	21,500	22,000	23,600	19,000	22,100	21,000	15,300	11,100	9,960	10,100	14,200
22	23,300	21,500	25,000	23,300	19,000	20,600	21,400	14,500	10,200	10,500	10,300	14,700
23	23,000	21,500	28,700	22,200	19,000	19,900	20,600	14,000	10,300	11,200	10,200	14,700
24	22,400	21,000	29,200	22,400	19,400	19,900	19,400	13,800	9,930	11,000	10,200	14,400
25	22,200	21,200	27,900	22,500	19,500	19,900	18,400	15,300	10,200	10,700	10,500	16,600
26	21,800	20,900	26,300	21,400	20,000	19,900	18,400	16,900	9,920	10,900	10,900	16,700
27	20,200	21,400	25,000	19,500	21,000	19,100	16,400	15,700	9,620	10,200	11,500	15,800
28	16,800	21,800	25,200	19,500	22,500	18,800	14,900	14,500	9,690	10,100	11,400	16,200
29	14,800	20,200	24,600	19,400	------	16,900	15,300	14,300	9,070	9,900	11,400	15,800
30	15,900	20,700	23,100	19,300	------	15,900	14,900	13,400	8,710	10,100	11,600	14,800
31	18,700	------	23,800	19,000	------	15,800	------	12,900	------	9,940	11,300	------
TOTAL	635,200	642,900	658,800	686,000	571,200	641,500	589,500	438,000	330,100	294,550	315,850	411,400
MEAN	20,490	21,430	21,250	22,130	20,400	20,690	19,650	14,130	11,000	9,502	10,190	13,710
MAX	24,000	23,400	29,200	35,500	22,800	25,700	27,300	16,900	13,200	11,200	11,600	16,700
MIN	14,800	19,000	17,600	17,900	18,300	15,800	14,800	11,500	8,710	8,620	9,270	11,400
AC-FT	1,260M	1,275M	1,307M	1,361M	1,133M	1,272M	1,169M	868,800	654,800	584,200	626,500	816,000

CAL YR 1972 TOTAL 9,755,930 MEAN 26,660 MAX 62,500 MIN 9,490 AC-FT 19,350,000
WTR YR 1973 TOTAL 6,215,000 MEAN 17,030 MAX 35,500 MIN 8,620 AC-FT 12,330,000

13269300 NORTH FORK BURNT RIVER NEAR WHITNEY, OREG.

LOCATION.--Lat 44°36'00", long 118°15'10", in NE¼ sec.23, T.11 S., R.36 E., Baker County, Wallowa Whitman National Forest, on right bank 0.1 mi (0.2 km) upstream from Petticoat Creek, 1.0 mi (1.6 km) downstream from U.S. Bureau of Reclamation damsite, 4.5 mi (7.2 km) southeast of Whitney, and 11.5 mi (18.5 km) northwest of Unity.

DRAINAGE AREA.--110 mi^2 (285 km^2), approximately.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (1,220 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 47.5 ft^3/s (1.35 m^3/s), 34,410 acre-ft/yr (42.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 254 ft^3/s (7.19 m^3/s) Apr. 13, gage height, 2.18 ft (0.664 m); minimum, 0.27 ft^3/s (0.008 m^3/s) Aug. 1.

Period of record: Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) Apr. 6, 1971, gage height, 4.31 ft (1.314 m); maximum gage height, 4.95 ft (1.509 m) Jan. 29, 1965 (ice jam); minimum discharge, 0.17 ft^3/s (0.005 m^3/s) Nov. 21, 1967, but may have been less when stage fell below inlets July 19 to Aug. 17, 1966.

REMARKS.--Records good. Some regulation from irrigation and mining operations upstream. A transmountain diversion from headwaters of Middle Fork John Day River delivers as much as 12 ft^3/s (0.34 m^3/s) to North Fork Burnt River above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.9	3.7	7.8	8.4	12	66	76	26	3.7	.29	.53
2	2.0	4.5	2.9	7.2	8.1	12	60	74	24	3.6	.33	.50
3	1.9	4.8	2.2	7.4	8.1	16	70	85	21	3.0	.35	.53
4	1.9	6.3	1.7	6.4	8.3	20	101	111	20	2.3	.36	.56
5	1.7	5.9	1.4	6.6	8.4	19	133	119	17	2.0	.38	.54
6	2.3	4.6	1.6	6.4	8.7	21	131	105	6.3	1.8	.42	.49
7	2.6	4.4	1.4	6.5	8.5	23	102	92	7.7	1.6	.45	.53
8	2.7	4.6	.94	6.3	8.2	23	96	96	9.8	1.4	.44	.69
9	2.9	4.1	.96	6.1	8.4	24	106	88	14	1.2	.42	.63
10	3.5	4.2	.87	6.3	8.5	25	117	76	16	1.1	.58	.62
11	4.2	4.7	1.1	6.7	8.6	26	136	64	14	1.0	.67	.62
12	3.8	4.7	1.4	6.8	8.6	25	169	59	13	.96	.66	.61
13	3.8	4.6	1.3	7.0	8.8	23	217	57	14	.91	.66	.56
14	3.6	4.4	1.4	7.5	8.9	21	196	60	14	.84	.61	.61
15	3.6	4.6	1.5	8.3	9.1	23	148	62	14	.78	.54	.92
16	3.4	4.5	1.7	15	9.6	31	137	61	14	.68	.51	.94
17	3.3	4.6	2.0	19	9.7	47	159	57	15	.66	.49	.96
18	3.1	4.6	2.2	22	9.5	47	124	49	14	.63	.48	.96
19	3.3	4.7	2.5	17	9.4	39	105	41	12	.73	.47	1.3
20	3.3	3.5	3.0	14	9.0	39	89	31	9.4	.81	.47	1.8
21	3.2	3.4	8.0	12	8.3	58	80	30	8.6	.64	.45	1.8
22	3.3	3.7	22	11	8.4	69	88	28	6.8	.58	.44	1.6
23	3.4	4.0	29	10	8.3	70	95	24	6.3	.67	.43	1.7
24	3.3	3.6	20	9.6	8.7	105	94	28	7.1	.73	.46	2.4
25	3.4	4.4	17	10	8.9	140	101	46	7.1	.66	.63	2.8
26	3.6	7.0	14	8.4	9.1	139	113	41	6.7	.59	1.0	2.1
27	3.4	6.6	12	9.0	9.5	100	129	36	5.9	.57	.93	1.7
28	3.6	6.0	12	8.9	10	74	122	33	4.9	.54	.82	1.6
29	3.6	5.5	10	8.8	------	67	98	30	4.3	.56	.68	1.6
30	2.7	4.4	7.4	8.5	------	71	85	29	4.0	.51	.65	1.5
31	2.7	-----	8.0	8.5	------	86	------	28	------	.33	.59	------
TOTAL	95.1	140.8	195.17	295.0	246.0	1.495	3.447	1.816	356.9	36.08	16.66	33.70
MEAN	3.07	4.69	6.30	9.52	8.79	48.2	115	58.6	11.9	1.16	.54	1.12
MAX	4.2	7.0	29	22	10	140	217	119	26	3.7	1.0	2.8
MIN	1.7	3.4	.87	6.1	8.1	12	60	24	4.0	.33	.29	.49
AC-FT	189	279	387	585	488	2.970	6.840	3.600	708	72	33	67

CAL YR 1972 TOTAL 24.112.57 MEAN 65.9 MAX 751 MIN .87 AC-FT 47.830
WTR YR 1973 TOTAL 8.173.41 MEAN 22.4 MAX 217 MIN .29 AC-FT 16.210

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

13270800 SOUTH FORK BURNT RIVER ABOVE BARNEY CREEK, NEAR UNITY, OREG.

LOCATION.--Lat 44°24'20", long 118°18'20", in S½ sec.28, T.13 S., R.36 E., Baker County, Wallowa Whitman National Forest, on right bank 300 ft (91 m) upstream from Barney Creek and 6 mi (10 km) southwest of Unity.

DRAINAGE AREA.--38.5 mi² (99.7 km²).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,347.06 ft (1,324.984 m) above mean sea level (levels by Bureau of Reclamation). Prior to July 18, 1963, nonrecording gage at site 6 ft (2 m) upstream at datum 0.16 ft (0.049 m) higher.

AVERAGE DISCHARGE.--10 years, 27.6 ft³/s (0.78 m³/s), 20,000 acre-ft/yr (24.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 41 ft³/s (1.16 m³/s) Apr. 11, gage height, 1.25 ft (0.381 m); maximum gage height, 3.47 ft (1.058 m) Dec. 11, 12 (backwater from ice); minimum daily discharge, 12 ft³/s (0.34 m³/s) Dec. 8.

Period of record: Maximum discharge, 186 ft³/s (5.27 m³/s) Apr. 29, 1965, gage height, 1.98 ft (0.604 m); maximum gage height, 3.47 ft (1.058 m) Dec. 11, 12, 1972 (backwater from ice); minimum daily discharge, 12 ft³/s (0.34 m³/s) Jan. 23, 24, 1969, Dec. 8, 1972.

REMARKS.--Records excellent except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	25	22	18	20	22	22	28	25	22	20	19
2	24	25	22	19	21	21	22	28	25	22	20	19
3	24	26	22	18	22	22	22	33	25	22	20	19
4	24	27	18	17	22	22	24	35	25	21	20	19
5	24	25	14	17	22	22	26	34	25	22	20	19
6	24	24	16	18	22	22	26	33	23	22	20	19
7	24	24	15	18	22	21	25	32	24	21	19	20
8	24	23	12	19	22	21	25	34	24	21	19	19
9	24	23	13	18	22	21	26	32	24	21	19	19
10	24	24	13	19	22	21	28	31	24	21	19	19
11	25	24	13	20	22	20	30	30	24	21	19	19
12	24	23	14	20	22	20	35	31	24	21	19	19
13	25	23	13	21	22	21	35	31	24	21	16	19
14	24	23	14	22	22	21	32	33	24	21	19	19
15	24	23	15	23	21	21	29	34	23	21	19	19
16	25	23	16	30	21	22	29	35	24	20	19	19
17	25	23	18	24	22	22	29	35	25	20	19	19
18	24	22	19	23	21	22	27	33	24	21	19	19
19	24	22	20	21	21	22	26	33	23	21	19	20
20	24	22	19	21	21	22	26	31	23	22	19	20
21	24	22	20	21	21	23	26	30	23	22	19	19
22	24	21	21	20	21	22	28	29	23	20	19	19
23	24	22	20	21	21	22	29	29	23	20	19	20
24	24	22	19	21	21	23	28	30	23	20	19	21
25	24	23	20	21	21	24	29	29	22	20	21	21
26	24	22	20	21	21	24	32	28	22	20	20	19
27	24	23	20	19	22	23	34	27	22	20	19	19
28	25	22	20	21	21	22	32	26	22	20	19	19
29	24	22	19	21	------	22	30	26	22	20	19	19
30	23	22	20	21	------	23	29	26	22	20	19	19
31	25	------	20	21	------	23	------	26	------	20	19	------
TOTAL	749	695	547	634	601	679	841	952	706	646	595	578
MEAN	24.2	23.2	17.6	20.5	21.5	21.9	28.0	30.7	23.5	20.8	19.2	19.3
MAX	25	27	22	30	22	24	35	35	25	22	21	21
MIN	23	21	12	17	20	20	22	26	22	20	16	19
AC-FT	1,490	1,380	1,080	1,260	1,190	1,350	1,670	1,890	1,400	1,280	1,180	1,150

CAL YR 1972 TOTAL 11,361 MEAN 31.0 MAX 92 MIN 12 AC-FT 22,530
WTR YR 1973 TOTAL 8,223 MEAN 22.5 MAX 35 MIN 12 AC-FT 16,310

13272500 UNITY RESERVOIR NEAR UNITY, OREG.

LOCATION.--Lat 44°30'20", long 118°11'00", in SW¼SE¼ sec.21, T.12 S., R.37 E., Baker County, at Unity Dam on Burnt River, 500 ft (152 m) downstream from Job Creek, 0.5 mi (0.8 km) downstream from confluence of North, Middle, and South Forks of Burnt River, 4.5 mi (7.2 km) north of Unity, and at mile 63.6 (102.3 km).

DRAINAGE AREA.--309 mi^2 (800 km^2).

PERIOD OF RECORD.--March 1938 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (Bureau of Reclamation bench mark). Prior to Nov. 4, 1941, reference mark or mercury pressure gage at same site and datum.

EXTREMES.--Current year: Maximum contents observed, 23,900 acre-ft (29.5 hm^3) May 8, 9, 11, elevation, 3,818.55 ft (1,163.894 m); minimum observed, 307 acre-ft (379,000 m^3) Sept. 16, 20, elevation, 3,778.50 ft (1,151.687 m).

Period of record: Maximum contents observed, 26,770 acre-ft (33.0 hm^3) May 21, 1971, elevation, 3,821.62 ft (1,164.830 m); no contents Sept. 5 to Oct. 4, 1955.

REMARKS.--Records good. Reservoir is formed by earthfill dam with concrete spillway and outlet works, completed by Bureau of Reclamation in 1937; storage began Feb. 19, 1938. Capacity, 25,200 acre-ft (31.1 hm^3) between elevations 3,776.5 ft (1,151.08 m), bottom of outlet gates, and 3,820.0 ft (1,164.34 m), top of radial gates on spillway when closed. Dead storage, 600 acre-ft (740,000 hm^3) below elevations 3,776.5 ft (1,151.08 m). Records given herein represent usable contents. Water used for irrigation in the Burnt River Irrigation District near Hereford and Bridgeport.

COOPERATION.--Data for computing capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)†	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,784.00	1,620	-
Oct. 31	3,788.30	3,250	+1,620
Nov. 30	3,793.50	5,790	+2,540
Dec. 31	3,797.30	7,930	+2,140
CAL YR 1972	-	-	-670
Jan. 31	3,801.65	10,670	+2,740
Feb. 28	3,804.75	12,780	+2,110
Mar. 31	3,810.00	16,680	+3,900
Apr. 30	3,818.00	23,410	+6,730
May 31	3,812.70	18,840	-4,570
June 30	3,804.80	12,820	-6,020
July 31	3,796.00	7,170	-5,650
Aug. 31	3,785.30	2,070	-5,100
Sept 30	3,780.50	697	-1,370
WTR YR 1973	-	-	-920

†Gage read daily between 1600 and 2030.

13273000 BURNT RIVER NEAR HEREFORD, OREG.

LOCATION.--Lat 44°30'20", long 118°10'55", in SE¼ sec.21, T.12 S., R.37 E., Baker County, on left bank 800 ft (244 m) downstream from Unity Dam, 0.4 mi (0.6 km) upstream from Van Cleve ditch, 7 mi (11 km) west of Hereford, and at mile 63.5 (102.2 km).

DRAINAGE AREA.--309 mi^2 (800 km^2).

PERIOD OF RECORD.--March to September 1915, April to September 1916, October 1928 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 3,758.19 ft (1,145.496 m) above mean sea level. Oct. 1, 1943, to Oct. 31, 1966, water-stage recorder at site 450 ft (137 m) downstream at datum 1.44 ft (0.439 m) lower. See WSP 1317 or 1737 for history of changes prior to Oct. 1, 1943.

AVERAGE DISCHARGE.--45 years (1928-73), 81.6 ft^3/s (2.31 m^3/s), 59,120 acre-ft/yr (72.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 218 ft^3/s (6.17 m^3/s) May 19, gage height, 4.30 ft (1.311 m); minimum, 0.38 ft^3/s (0.011 m^3/s) Oct. 12.

Period of record: Maximum discharge, 2,220 ft^3/s (62.9 m^3/s) Apr. 17, 1943, gage height, 8.79 ft (2.679 m), present datum, from rating curve extended above 1,300 ft^3/s (36.8 m^3/s); maximum gage height, 9.29 ft (2.832 m), present datum, Apr. 16, 1943, just before concrete control washed out; no flow at times; minimum discharge before construction of Unity Dam, 1.6 ft^3/s (0.045 m^3/s) Aug. 31, 1935.

REMARKS.--Records excellent. Flow regulated since 1938 by Unity Reservoir (see sta 13272500). Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 903: 1939. WSP 1397: 1916, 1930, 1930(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	9.9	7.7	8.1	8.5	23	7.4	50	130	97	93	75
2	41	9.9	7.7	8.1	8.5	24	4.7	83	130	96	92	73
3	40	10	7.7	7.8	8.5	25	4.6	91	126	96	91	71
4	40	10	7.7	7.9	8.5	26	4.6	91	116	95	91	69
5	40	10	7.7	7.8	8.9	26	4.6	91	116	95	90	66
6	31	11	7.7	7.6	8.9	27	4.0	80	113	94	89	65
7	26	11	7.7	7.4	8.9	28	4.1	74	114	94	90	62
8	26	11	7.9	7.2	8.9	28	4.2	73	120	93	87	59
9	22	11	7.9	7.2	8.9	29	4.0	82	120	93	86	53
10	19	9.3	7.9	7.2	9.2	28	4.4	90	119	92	86	46
11	12	6.7	7.9	7.2	9.2	28	4.6	79	119	92	91	43
12	.38	6.8	7.7	7.4	9.2	29	5.0	100	118	91	91	41
13	.50	6.8	7.7	7.4	9.2	29	5.0	117	117	94	90	37
14	.54	6.8	7.7	7.4	9.2	29	4.4	149	117	98	89	23
15	.63	6.9	7.7	7.4	9.2	29	4.4	163	114	105	90	20
16	.63	7.1	7.7	7.4	9.2	29	4.7	163	113	102	90	18
17	.67	7.1	7.8	7.4	9.6	29	3.8	165	112	102	90	9.6
18	.72	7.1	7.7	7.4	9.6	30	3.3	190	111	101	90	9.6
19	.72	7.1	7.7	7.4	9.6	30	3.1	200	110	100	91	9.6
20	.72	7.1	7.8	7.7	9.6	30	2.7	215	108	100	90	7.1
21	.67	7.3	7.9	7.7	9.6	30	2.7	215	107	99	92	5.2
22	.58	7.4	7.9	7.7	9.6	28	3.0	207	107	98	90	5.2
23	6.3	7.4	7.9	7.7	11	27	3.0	201	106	98	88	5.2
24	11	7.4	7.9	7.9	19	26	3.0	180	105	97	88	2.7
25	12	7.4	7.9	7.9	20	24	4.7	161	104	97	88	1.6
26	13	7.4	7.9	7.9	16	20	5.2	156	102	96	86	.58
27	8.7	7.4	7.9	7.9	18	16	6.8	152	101	95	86	.58
28	9.6	7.7	7.9	8.2	21	13	15	152	100	95	83	.66
29	9.6	7.7	7.9	8.2	------	12	15	151	100	95	82	.66
30	9.6	7.7	8.0	8.2	------	12	16	151	99	94	80	.66
31	9.8	------	7.9	8.5	------	11	------	160	------	93	78	------
TOTAL	434.36	247.4	242.0	238.2	305.5	775	162.9	4,232	3,374	2,987	2,738	881.26
MEAN	14.0	8.25	7.81	7.68	10.9	25.0	5.43	136	112	96.4	88.3	29.4
MAX	41	11	8.0	8.5	21	30	16	215	130	105	93	75
MIN	.38	6.7	7.7	7.2	8.5	11	2.7	50	99	91	78	.58
AC-FT	862	491	480	472	606	1,540	323	8,390	6,690	5,920	5,430	1,750

CAL YR 1972 TOTAL 43,425.34 MEAN 119 MAX 756 MIN .38 AC-FT 86,130
WTR YR 1973 TOTAL 16,617.62 MEAN 45.5 MAX 215 MIN .38 AC-FT 32,960

13274200 BURNT RIVER NEAR BRIDGEPORT, OREG.

LOCATION.--Lat 44°32'27", long 117°41'10", in NW¼NW¼ sec.10, T.12 S., R.41 E., Baker County, on left bank 0.5 mi (0.8 km) downstream from Dark Canyon, 4.6 mi (7.4 km) upstream from Deer Creek, 5.0 mi (8.0 km) northeast of Bridgeport, and at mile 37.1 (59.7 km).

DRAINAGE AREA.--650 mi^2 (1,680 km^2), approximately.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,223.22 ft (982.437 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--17 years, 101 ft^3/s (2.86 m^3/s), 73,170 acre-ft/yr (90.2 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 130 ft^3/s (3.68 m^3/s) Jan. 17; maximum gage height, 5.18 ft (1.579 m) Jan. 16 (ice jam); minimum discharge, 5.2 ft^3/s (0.15 m^3/s) Dec. 5.

Period of record: Maximum discharge, 1,600 ft^3/s (45.3 m^3/s) Apr. 9, 1971, gage height, 6.40 ft (1.951 m); minimum, 5.2 ft^3/s (0.15 m^3/s) Dec. 5, 1972.

REMARKS.--Records good except those for December and January, which are fair. Flow regulated since 1938 by Unity Reservoir (see sta 13272500). Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	30	25	29	27	63	37	26	107	57	48	35
2	67	30	25	29	29	55	35	29	96	59	46	36
3	66	31	24	26	31	49	32	49	86	59	47	39
4	61	34	13	24	34	49	30	63	90	60	49	38
5	58	35	5.2	22	42	49	30	71	74	56	47	31
6	59	32	6.8	20	47	48	32	66	60	55	42	32
7	60	31	6.8	19	52	49	33	62	50	54	40	32
8	54	32	6.2	18	43	49	35	58	46	50	41	32
9	50	31	5.8	20	40	50	35	47	46	51	39	29
10	49	31	5.6	24	41	51	37	39	49	51	36	27
11	47	32	6.2	30	40	52	37	38	54	48	33	25
12	46	31	7.0	39	37	50	38	33	57	44	37	23
13	42	28	8.6	45	37	49	39	28	56	40	41	22
14	39	28	10	52	39	49	42	30	59	31	41	21
15	35	28	12	66	39	48	41	38	62	36	37	22
16	32	28	16	80	40	49	40	54	59	37	34	22
17	31	28	23	130	39	50	42	51	65	41	35	23
18	29	28	24	114	35	48	41	41	61	39	35	23
19	28	27	29	73	34	48	40	40	62	39	40	23
20	28	27	34	55	34	49	38	49	61	44	31	25
21	28	26	40	45	34	50	33	65	61	45	33	23
22	26	26	48	40	31	51	32	78	57	42	32	21
23	26	27	41	37	35	49	30	71	55	40	30	21
24	24	23	37	32	33	49	31	76	58	37	32	24
25	26	26	33	35	34	50	33	100	63	36	34	27
26	31	26	31	33	43	52	33	106	64	43	35	27
27	31	27	30	30	49	49	31	98	62	40	37	27
28	31	26	30	31	55	45	30	98	61	45	38	30
29	29	26	28	32	------	41	33	98	59	45	37	28
30	29	25	27	30	------	38	35	104	57	40	36	27
31	29	------	28	28	------	38	------	105	------	44	36	------
TOTAL	1,262	860	665.6	1,288	1,076	1,517	1,055	1,909	1,897	1,416	1,178	815
MEAN	40.7	28.7	21.5	41.5	38.4	48.9	35.2	61.6	63.2	45.7	38.0	27.2
MAX	71	35	48	130	55	63	42	106	107	60	49	39
MIN	24	23	5.2	18	27	38	30	26	46	31	30	21
AC-FT	2,500	1,710	1,320	2,550	2,130	3,010	2,090	3,790	3,760	2,810	2,340	1,620

CAL YR 1972 TOTAL 51,666.6 MEAN 141 MAX 960 MIN 5.2 AC-FT 102,500
WTR YR 1973 TOTAL 14,938.6 MEAN 40.9 MAX 130 MIN 5.2 AC-FT 29,630

PEAK DISCHARGE (BASE, 350 CFS).--No peak above base.

13275000 BURNT RIVER AT HUNTINGTON, OREG.

LOCATION.--Lat 44°21'30", long 117°16'20", in NE¼ sec.13, T.14 S., R.44 E., Baker County, on right bank 0.5 mi (0.8 km) northwest of Huntington and at mile 2.9 (4.7 km).

DRAINAGE AREA.--1,093 mi^2 (2,831 km^2).

PERIOD OF RECORD.--September 1928 to September 1932, October 1956 to September 1959, June 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,104.75 ft (641.528 m) above mean sea level. Sept. 13, 1928, to Sept. 30, 1932, nonrecording gage at site 200 ft (61 m) upstream at different datum. Oct. 1, 1956, to Sept. 30, 1959, water-stage recorder and Oct. 1, 1959, to Aug. 20, 1962, crest-stage gage.

AVERAGE DISCHARGE.--18 years, 123 ft^3/s (3.48 m^3/s), 89,110 acre-ft/yr (110 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,320 ft^3/s (37.4 m^3/s) Jan. 16, gage height, 5.22 ft (1.591 m); minimum daily, 9.0 ft^3/s (0.25 m^3/s) Dec. 10.
Period of record: Maximum discharge, 2,220 ft^3/s (62.9 m^3/s) Dec. 22, 1964, gage height, 5.94 ft (1.811 m); maximum gage height, 6.80 ft (2.073 m) Feb. 3, 1963, (ice jam); no flow at times.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow regulated since 1938 by Unity reservoir (see station 13272500). Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	59	60	35	81	194	80	33	102	40	35	21
2	94	60	60	38	80	148	77	31	96	43	39	19
3	90	60	59	34	83	123	74	33	82	40	40	19
4	86	68	36	33	86	116	71	52	83	39	34	21
5	79	71	11	30	99	110	70	66	85	40	29	21
6	79	67	13	32	125	105	72	74	72	37	23	19
7	83	64	13	29	107	103	69	68	56	33	20	18
8	82	68	12	28	101	104	70	64	50	38	28	18
9	77	66	10	29	96	105	72	60	45	33	33	15
10	77	67	9.0	35	91	111	74	50	46	36	33	13
11	77	66	11	45	94	110	75	40	45	37	25	14
12	75	67	17	50	91	102	79	39	48	33	23	14
13	71	65	16	60	90	99	81	34	51	29	26	14
14	72	62	21	70	91	97	79	29	54	25	28	13
15	73	61	23	86	90	95	80	30	59	23	29	15
16	66	61	30	331	90	95	81	33	57	19	25	15
17	67	61	35	504	89	97	80	34	57	14	22	16
18	64	61	39	258	87	96	72	30	73	13	24	17
19	63	61	45	171	82	94	76	27	63	18	30	19
20	62	60	52	119	80	96	72	25	63	31	32	24
21	60	59	66	100	82	97	67	23	58	31	21	27
22	60	58	80	90	80	98	62	30	58	32	22	24
23	58	59	66	84	82	95	60	40	59	33	24	26
24	56	58	58	84	85	96	56	55	58	28	20	28
25	56	56	50	86	82	98	55	91	56	21	17	29
26	57	63	45	85	101	102	51	100	58	14	20	29
27	62	62	42	79	159	98	43	100	58	12	21	30
28	61	61	42	75	173	94	38	94	56	14	21	29
29	61	61	40	81	------	88	35	85	48	16	20	30
30	58	60	39	82	------	84	32	87	43	23	21	29
31	58	------	40	82	------	83	------	93	------	36	20	------
TOTAL	2,175	1,872	1,130.	2,945	2,677	3,233	2,003	1,650	1,839	879	805	626
MEAN	70.2	62.4	36.	95.0	95.6	104	66.8	53.2	61.3	28.4	26.0	20.9
MAX	94	71	8	504	173	194	81	100	102	43	40	30
MIN	56	56	9.	28	80	83	32	23	43	12	17	13
AC-FT	4,310	3,710	2,24	5,840	5,310	6,410	3,970	3,270	3,650	1,740	1,600	1,240

CAL YR 1972 TOTAL 66,196.0 MEAN 181 MAX 1,210 MIN 9.0 AC-FT 131,300
WTR YR 1973 TOTAL 21,834.0 MEAN 59.8 MAX 504 MIN 9.0 AC-FT 43,310

NOTE.--No gage-height record Nov. 6 to Jan. 15.

13275300 POWDER RIVER NEAR SUMPTER, OREG.

LOCATION.--Lat 44°40'20", long 117°59'40", in NE¼NE¼ sec.25, T.10 S., R.38 E., Baker County, Wallowa Whitman National Forest, on left bank 1,200 ft (366 m) downstream from Mason Dam, 1.4 mi (2.3 km) upstream from California Gulch, 10.9 mi (17.4 km) southwest of Baker, and at mile 123.2 (198.2 km).

DRAINAGE AREA.--168 mi² (435 km²), approximately. Prior to Oct. 1, 1970, 170 mi² (440 km²) at cableway, 0.5 mi (0.8 km) downstream.

PERIOD OF RECORD.--April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,898.47 ft (1,188.254 m) above mean sea level (Bureau of Reclamation bench mark). Prior to July 29, 1965, nonrecording gage at datum 1.03 ft (0.314 m) higher.

AVERAGE DISCHARGE.--8 years, 98.0 ft³/s (2.78 m³/s), 71,000 acre-ft/yr (87.5 hm³/yr), not adjusted for storage in Phillips Lake.

EXTREMES.--Current year: Maximum discharge, 376 ft³/s (10.6 m³/s) May 25-28; maximum gage height, 3.38 ft (1.030 m) June 8, 9; minimum discharge, 5.0 ft³/s (0.14 m³/s) Sept. 29.

Period of record: Maximum discharge observed, 971 ft³/s (27.5 m³/s) Apr. 30, 1965, gage height, 4.43 ft (1.350 m); no flow Nov. 12, 1967.

Maximum discharge, 1,600 ft³/s (45.3 m³/s), approximately, Mar. 20, 1910, based on comparison with records for station downstream, near Baker.

REMARKS.--Records good. Flow completely regulated since Oct. 31, 1967, by Phillips Lake, active capacity, 90,540 acre-ft (112 hm³). Many small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	14	12	13	11	11	211	230	176	288	198
2	14	16	13	13	12	11	11	227	232	176	291	196
3	15	16	14	14	12	11	11	282	243	171	288	193
4	15	17	14	14	11	11	11	295	255	146	258	164
5	14	16	12	14	11	11	11	285	294	149	261	120
6	15	16	12	14	11	11	11	285	294	149	261	55
7	16	16	13	13	11	10	12	285	300	157	267	66
8	16	17	13	12	11	10	14	285	315	157	288	111
9	16	16	13	12	11	10	42	288	354	157	291	80
10	16	17	13	13	11	11	52	288	312	166	291	39
11	16	17	13	14	11	12	56	291	312	232	291	39
12	17	17	13	14	11	12	67	291	333	232	267	39
13	16	16	13	15	10	12	67	291	309	232	243	39
14	17	16	13	16	10	12	67	294	252	249	270	31
15	17	16	14	14	10	11	76	294	183	267	240	7.2
16	18	14	14	13	10	10	93	296	151	267	240	7.2
17	16	14	14	13	10	10	96	296	153	267	196	7.2
18	17	15	14	13	9.6	10	101	296	146	270	171	7.2
19	17	15	14	14	9.6	10	122	297	126	270	178	7.2
20	17	14	14	14	9.6	10	122	312	126	273	198	7.2
21	17	14	14	14	10	10	122	333	132	235	188	7.2
22	18	14	14	14	10	11	122	339	157	219	230	6.8
23	17	14	14	11	10	11	122	368	157	227	193	6.5
24	18	14	14	9.3	11	11	166	357	157	252	136	5.8
25	16	14	14	9.0	11	10	188	351	160	235	162	5.5
26	15	14	14	9.6	11	10	193	376	171	235	162	5.8
27	15	14	14	11	12	10	211	376	176	237	166	5.5
28	15	13	15	12	12	10	211	366	176	237	181	5.5
29	16	13	16	12	------	11	211	365	176	240	178	5.2
30	15	14	15	12	------	11	211	315	176	252	181	5.2
31	16	------	13	13	------	11	------	276	------	285	201	------
TOTAL	495	455	424	397.9	301.8	332	2,786	9,471	6,558	6,817	7,056	1,472.2
MEAN	16.0	15.2	13.7	12.8	10.8	10.7	92.9	306	219	220	228	49.1
MAX	18	17	16	16	13	12	211	376	354	285	291	198
MIN	12	13	12	9.0	9.6	10	11	211	126	146	136	5.2
AC-FT	982	902	841	789	599	659	5,530	18,790	13,010	13,520	14,000	2,920

CAL YR 1972 TOTAL 49,092.6 MEAN 134 MAX 464 MIN 4.9 AC-FT 97,380
WTR YR 1973 TOTAL 36,565.9 MEAN 100 MAX 376 MIN 5.2 AC-FT 72,530

13286700 POWDER RIVER NEAR RICHLAND, OREG.

LOCATION.--Lat 44°46'40", long 117°17'30", in SE¼ sec.14, T.9 S., R.44 E., Baker County, on left bank 0.4 mi (0.6 km) upstream from Upper Timber Canyon, 6.0 mi (9.7 km) west of Richland, and at mile 20.3 (32.7 km).

DRAINAGE AREA.--1,310 mi^2 (3,390 km^2), approximately.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,277.42 ft (694.158 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 238 ft^3/s (6.74 m^3/s), 172,400 acre-ft/yr (213 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 786 ft^3/s (22.3 m^3/s) Jan. 18, gage height, 3.11 ft (0.948 m); maximum gage height, 5.27 ft (1.606 m) date unknown (ice jam); minimum discharge, 7.5 ft^3/s (0.21 m^3/s) Aug. 8.

Period of record: Maximum discharge, 3,470 ft^3/s (98.3 m^3/s) Jan. 31, 1965, gage height, 6.68 ft (2.036 m); maximum gage height, 7.10 ft (2.164 m) Feb. 3, 1963 (ice jam); minimum discharge, 0.80 ft^3/s (0.023 m^3/s) Aug. 11, 12, 1966.

REMARKS.--Records good. Regulation by several reservoirs, the largest being Phillips Lake since Oct. 31, 1967, active capacity, 90,540 acre-ft (112 hm^3), and Thief Valley Reservoir, capacity, 17,400 acre-ft (21.5 hm^3). Diversions for irrigation above and below station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	42	45	47	212	312	187	34	36	28	11	23
2	84	44	45	47	201	317	183	28	42	29	11	20
3	85	44	44	45	171	308	171	29	43	26	12	22
4	81	51	44	44	167	287	163	38	41	22	12	22
5	86	51	41	45	186	275	173	53	40	18	13	22
6	83	48	28	44	210	262	191	49	30	19	12	19
7	83	45	25	42	203	256	181	49	25	20	11	19
8	84	49	23	40	200	256	163	54	20	20	9.5	18
9	83	50	22	39	201	258	162	53	19	19	9.4	18
10	84	49	22	40	199	262	164	50	22	27	10	17
11	86	49	24	42	197	269	174	49	36	22	12	18
12	84	49	29	45	194	259	183	51	39	21	10	21
13	61	46	27	50	194	252	209	48	33	22	11	19
14	60	46	29	70	207	240	215	45	30	18	14	18
15	66	46	30	100	210	222	178	40	35	20	14	18
16	60	46	35	130	209	218	155	38	38	18	13	18
17	60	46	42	250	220	219	164	29	39	19	12	17
18	58	45	45	760	222	217	149	32	44	18	12	18
19	58	38	46	585	209	214	132	31	46	17	10	19
20	58	36	47	371	200	212	117	28	42	15	9.1	25
21	56	34	48	282	192	217	106	26	37	24	8.9	25
22	56	33	46	284	196	219	81	27	34	25	8.7	27
23	56	40	44	288	198	208	92	24	35	23	8.5	28
24	55	31	50	273	204	205	79	31	40	22	8.8	31
25	56	32	49	209	215	209	59	51	49	21	11	33
26	57	38	56	195	218	223	47	67	56	21	14	32
27	48	41	64	181	239	223	40	54	50	16	20	33
28	42	48	52	157	275	209	35	52	46	18	26	35
29	41	48	45	151	------	199	43	48	44	19	39	38
30	38	45	47	160	------	183	44	41	37	15	38	39
31	40	------	48	173	------	194	------	37	------	13	24	------
TOTAL	2,033	1,310	1,242	5,189	5,749	7,404	4,040	1,286	1,128	635	434.9	712
MEAN	65.6	43.7	40.1	167	205	239	135	41.5	37.6	20.5	14.0	23.7
MAX	86	51	64	760	275	317	215	67	56	29	39	39
MIN	38	31	22	39	167	183	35	24	19	13	8.5	17
AC-FT	4,030	2,600	2,460	10,290	11,400	14,690	8,010	2,550	2,240	1,260	863	1,410

CAL YR 1972 TOTAL 148,195.0 MEAN 405 MAX 1,830 MIN 20 AC-FT 293,900
WTR YR 1973 TOTAL 31,162.9 MEAN 85.4 MAX 760 MIN 8.5 AC-FT 61,810

NOTE.--No gage-height record Dec. 9 to Jan. 18.

13288200 EAGLE CREEK ABOVE SKULL CREEK, NEAR NEW BRIDGE, OREG.

LOCATION.--Lat 44°52'50", long 117°15'10", in SE¼ sec.7, T.8 S., R.45 E., Baker County, Wallowa-Whitman National Forest, on left bank 0.5 mi (0.8 km) upstream from Skull Creek, 6.5 mi (10.5 km) northwest of New Bridge, and at mile 10.5 (16.9 km).

DRAINAGE AREA.--156 mi^2 (404 km^2).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 322 ft^3/s (9.12 m^3/s), 233,300 acre-ft/yr (288 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft^3/s (51.5 m^3/s) May 17, gage height, 3.28 ft (1.000 m); maximum gage height, 3.90 ft (11.89 m) Dec. 19 (backwater from ice); minimum daily discharge, 54 ft^3/s (1.53 m^3/s) Dec. 9, 10, result of freezeup.
Period of record: Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) May 28, 1971, gage height, 3.81 ft (1.161 m); maximum gage height, 6.88 ft (2.097 m) Jan. 25, 1962 (ice jam); minimum daily discharge, 44 ft^3/s (1.25 m^3/s) Dec. 17, 1964.

REMARKS.--Records good except those for winter periods, which are poor. No regulation. Some diversions above station for irrigation and one small interbasin diversion for irrigation supply. All diversions are small compared to flow at station during irrigation season.

DISCHARGF, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SFPTEMBFR 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SFP
1	82	99	102	100	84	128	136	424	967	365	142	84
2	82	99	99	94	80	125	133	464	818	331	139	90
3	82	104	97	94	82	117	139	548	714	319	139	88
4	80	148	80	94	84	115	156	542	655	323	133	86
5	90	124	72	92	88	112	189	524	706	315	136	84
6	92	104	64	90	86	112	207	566	810	299	130	82
7	92	102	60	80	84	115	196	554	949	279	128	90
8	90	104	56	72	84	117	193	608	976	263	122	90
9	94	99	54	66	82	117	207	560	958	255	120	84
10	99	104	54	70	86	125	214	524	746	247	125	79
11	107	102	56	78	84	120	251	518	669	244	125	77
12	99	97	63	84	84	115	299	590	648	228	120	77
13	97	97	58	95	82	115	375	738	669	210	115	75
14	99	97	56	110	82	112	365	922	662	196	112	75
15	99	94	60	120	82	112	345	1,080	560	186	107	77
16	97	94	66	142	82	112	327	1,340	512	179	105	77
17	94	97	70	135	84	112	303	1,500	464	172	105	75
18	92	99	78	125	82	110	279	1,520	407	166	102	73
19	99	94	80	112	82	110	263	1,660	385	163	102	97
20	97	90	84	100	82	117	247	1,390	407	169	100	112
21	97	87	88	90	82	122	244	1,010	494	160	97	97
22	94	82	90	90	84	128	263	931	584	163	97	86
23	97	87	95	94	84	130	271	922	570	160	95	90
24	94	90	100	96	86	139	283	1,280	494	153	95	100
25	94	94	110	100	88	153	319	1,240	488	147	100	115
26	94	181	120	90	90	166	380	886	482	144	97	97
27	94	129	130	88	97	163	458	746	518	142	93	90
28	94	112	120	88	112	153	482	706	536	139	90	90
29	94	107	110	82	------	144	435	762	488	139	90	86
30	90	102	100	92	------	136	424	858	426	139	86	84
31	94	------	98	88	------	144	------	1,020	------	142	84	------
TOTAL	2,899	3,119	2,570	2,953	2,389	3,896	8,383	26,936	18,762	6,537	3,431	2,607
MEAN	93.5	104	82.9	95.3	85.3	126	279	869	625	211	111	86.9
MAX	107	181	130	142	112	166	482	1,660	976	365	142	115
MIN	80	82	54	66	80	110	133	424	385	139	84	73
AC-FT	5,750	6,190	5,100	5,860	4,740	7,730	16,630	53,430	37,210	12,970	6,810	5,170

CAL YR 1972 TOTAL 130,886 MEAN 358 MAX 2,330 MIN 54 AC-FT 259,600
WTR YR 1973 TOTAL 84,401 MEAN 231 MAX 1,660 MIN 54 AC-FT 167,400

PEAK DISCHARGE (BASE, 1,700 CFS).--May 17 (2130) 1,820 cfs (3.28 ft).

13289700 Brownlee Reservoir at Brownlee Dam, Idaho-Oregon State line

LOCATION.--Lat 44°50'08", long 116°53'58", in SE¼SE¼ sec.2, T.17 N., R.5 W., Washington County, at Brownlee Dam on Snake River near Idaho end of dam, 1.1 mi (1.8 km) upstream from Wildhorse River, 3.5 mi (5.6 km) downstream from Brownlee Creek, 10.5 mi (16.9 km) east of Halfway, Oreg., and at mile 285.0 (458.6 km).

DRAINAGE AREA.--72,590 sq mi (188,000 sq km), approximately.

PERIOD OF RECORD.--May 1958 to current year. Published as "at Idaho-Oregon State line" 1958-59.

GAGE.--Remote registering water-stage recorder. Datum of gage is mean sea level, Idaho Power Co. datum. Prior to Feb. 2, 1959, nonrecording gage or levels to water surface at present site and datum.

EXTREMES.--Current year: Maximum contents, 1,442,000 acre-ft (1,780 cu hm) Sept. 3, 19, 20 (elevation, 2,078.12 ft or 633.411 m); minimum, 911,100 acre-ft (1,120 cu hm) Mar. 16 (elevation, 2,033.19 ft or 619.716 m).

Period of record: Maximum contents, 1,453,500 acre-ft (1,792 cu hm) Aug. 6, 1962 (elevation, 2,078.91 ft or 633.652 m); minimum since full capacity was attained June 23, 1959, 441,200 acre-ft (544 cu hm) Apr. 25, 1971 (elevation, 1,975.20 ft or 602.041 m).

REMARKS.--Reservoir is formed by earth-fill dam. Storage began May 5, 1958. Dam was completed in fall of 1958. Normal pool elevation, 2,077 ft (633 m). Water is used for power generation.

COOPERATION.--Water-stage recorder graph and capacity table furnished by Idaho Power Co.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,975.0	439,800	2,040.0	977,100
1,980.0	473,900	2,060.0	1,198,000
2,000.0	618,700	2,080.0	1,469,000
2,020.0	786,400		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,423	1,404	1,325	1,225	1,065	919.9	1,032	1,280	1,433	1,371	1,428	1,434
2	1,422	1,402	1,321	1,218	1,053	924.5	1,027	1,281	1,435	1,373	1,430	1,441
3	1,421	1,402	1,320	1,210	1,043	928.8	1,026	1,284	1,438	1,373	1,429	1,438
4	1,417	1,407	1,323	1,200	1,029	932.7	1,027	1,283	1,435	1,377	1,430	1,439
5	1,417	1,412	1,320	1,186	1,020	932.7	1,031	1,288	1,432	1,377	1,436	1,438
6	1,411	1,417	1,316	1,172	1,012	931.6	1,033	1,296	1,426	1,376	1,437	1,434
7	1,403	1,411	1,307	1,155	1,008	930.4	1,034	1,298	1,424	1,377	1,435	1,431
8	1,397	1,401	1,295	1,133	1,002	926.7	1,039	1,295	1,420	1,375	1,430	1,431
9	1,393	1,395	1,278	1,113	1,001	922.4	1,050	1,294	1,427	1,369	1,427	1,430
10	1,390	1,384	1,262	1,108	996.6	916.9	1,061	1,292	1,436	1,362	1,424	1,430
11	1,388	1,380	1,248	1,099	997.7	917.7	1,073	1,291	1,436	1,361	1,424	1,429
12	1,392	1,376	1,234	1,087	997.5	918.7	1,084	1,296	1,435	1,362	1,427	1,428
13	1,401	1,362	1,217	1,082	998.7	919.1	1,097	1,305	1,433	1,365	1,424	1,426
14	1,400	1,357	1,199	1,089	998.2	914.8	1,111	1,306	1,434	1,370	1,421	1,426
15	1,402	1,354	1,183	1,097	993.1	911.9	1,135	1,305	1,433	1,376	1,417	1,428
16	1,400	1,355	1,171	1,108	981.0	915.9	1,158	1,305	1,435	1,378	1,413	1,433
17	1,410	1,357	1,162	1,140	968.9	922.1	1,184	1,305	1,437	1,379	1,411	1,436
18	1,418	1,359	1,161	1,153	959.6	932.6	1,209	1,315	1,436	1,381	1,413	1,439
19	1,420	1,359	1,160	1,157	948.7	939.0	1,220	1,329	1,435	1,387	1,417	1,442
20	1,417	1,362	1,156	1,159	940.3	943.2	1,235	1,346	1,434	1,393	1,416	1,440
21	1,418	1,362	1,158	1,157	930.6	957.1	1,242	1,356	1,432	1,400	1,413	1,439
22	1,414	1,358	1,169	1,156	923.5	970.4	1,250	1,367	1,424	1,408	1,409	1,439
23	1,413	1,357	1,193	1,152	921.8	986.9	1,256	1,376	1,421	1,411	1,408	1,439
24	1,411	1,355	1,215	1,145	922.1	1,007	1,258	1,381	1,423	1,419	1,407	1,436
25	1,411	1,352	1,233	1,139	927.2	1,024	1,258	1,388	1,415	1,419	1,410	1,440
26	1,411	1,348	1,241	1,131	930.7	1,025	1,257	1,401	1,407	1,418	1,417	1,440
27	1,413	1,341	1,241	1,122	927.1	1,026	1,263	1,419	1,395	1,420	1,421	1,439
28	1,411	1,338	1,242	1,110	921.5	1,028	1,268	1,430	1,385	1,420	1,424	1,438
29	1,404	1,333	1,239	1,103	------	1,031	1,275	1,437	1,373	1,423	1,428	1,436
30	1,397	1,329	1,236	1,091	------	1,033	1,277	1,436	1,368	1,427	1,430	1,431
31	1,401	------	1,231	1,078	------	1,031	------	1,433	------	1,428	1,433	------
MAX	1,423	1,417	1,325	1,225	1,065	1,033	1,277	1,437	1,438	1,428	1,437	1,442
MIN	1,388	1,329	1,156	1,078	921.5	911.9	1,026	1,280	1,368	1,361	1,407	1,426
(†)	2,075.12	2,069.88	2,062.35	2,049.82	2,036.27	2,045.37	2,066.06	2,077.42	2,072.80	2,077.10	2,077.42	2,077.30
(‡)	-23	-72	-98	-153	-156.5	+109.5	+246	+156	-65	+60	+5	-2

WTR YR 1973 MAX 1,442 MIN 911.9

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-feet.

13290190 Pine Creek near Oxbow, Oreg.

LOCATION.--Lat 44°57'13", long 116°52'21", in NE¼SW¼ sec.17, T.7 S., R.48 E., Baker County, 1.8 mi (2.9 km) south of Oxbow, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--230 sq mi (596 sq km), approximately.

PERIOD OF RECORD.--November 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,850.48 ft (564.026 m) above mean sea level (levels by Idaho Power Co.). Prior to Aug. 24, 1967, nonrecording gage at site 1.7 mi (2.7 km) downstream at different datum.

AVERAGE DISCHARGE.--6 years, 384 cfs (10.9 cu m/s), 278,200 acre-ft/yr (343 cu hm/yr); 5-year base period (1968-72), 407 cfs (11.5 cu m/s).

EXTREMES.--Current year: Maximum discharge, 2,290 cfs (64.9 cu m/s) May 25 (gage height, 6.90 ft or 2.103 m); minimum, 23 cfs (0.65 cu m/s) Aug. 23, 24 (gage height, 2.94 ft or 0.896 m).

Period of record: Maximum discharge, 7,110 cfs (201 cu m/s) Feb. 21, 1968 (gage height, 9.82 ft or 2.993 m); minimum, 23 cfs (0.65 cu m/s) Aug. 23, 24, 1973 (gage height, 2.94 ft or 0.896 m).

REMARKS.--Records good except those for December, which are fair. Diversions above station for irrigation of about 19,000 acres (7,690 sq hm) (1966 determination).

Rating table (gage height, in feet, and discharge, in cubic feet per second)

2.8	19	4.5	331
3.0	30	5.0	563
3.2	45	6.0	1,330
3.5	82	7.0	2,540
4.0	180		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	62	95	203	162	877	335	424	807	113	32	30
2	55	65	95	195	145	879	313	415	683	110	34	30
3	54	67	95	157	151	713	303	549	569	90	33	30
4	53	152	83	122	153	614	329	715	499	81	32	30
5	53	144	54	156	179	600	406	787	486	80	30	29
6	53	104	78	145	195	576	445	809	535	72	31	27
7	53	96	100	129	195	565	407	760	602	67	30	27
8	53	107	121	94	199	580	379	809	618	67	31	31
9	53	100	210	111	213	576	372	778	636	59	29	30
10	54	101	223	147	218	622	364	678	504	50	29	29
11	56	101	255	143	226	605	416	610	472	42	30	28
12	58	99	244	143	218	546	515	601	437	43	30	28
13	58	92	208	207	217	522	668	666	443	44	29	26
14	57	87	191	273	224	475	667	804	480	43	28	27
15	60	88	169	292	228	439	596	928	468	38	28	29
16	60	88	194	1,040	235	417	563	1,090	390	35	28	30
17	60	93	217	1,100	246	422	560	1,220	369	35	28	29
18	60	92	256	665	231	387	488	1,290	333	37	29	29
19	60	95	481	596	217	362	433	1,170	297	43	29	35
20	60	88	476	454	205	368	376	1,120	266	53	29	56
21	60	83	898	393	203	427	345	850	255	59	28	67
22	60	83	522	282	203	398	345	705	244	51	27	51
23	60	87	495	278	212	382	370	682	257	44	26	49
24	60	83	1,050	250	229	401	376	1,070	236	43	26	52
25	60	83	541	251	254	443	417	1,770	231	41	29	59
26	61	134	385	227	290	469	459	1,020	214	38	32	54
27	62	135	346	178	433	463	515	749	209	36	31	50
28	62	107	391	184	648	418	559	674	201	36	30	50
29	62	105	313	171	------	381	492	662	169	35	30	48
30	60	96	261	187	------	353	446	732	137	34	30	47
31	60	------	231	178	------	374	------	864	------	32	30	------
TOTAL	1,793	2,917	9,270	8,951	6,529	15,654	13,259	26,001	12,047	1,651	918	1,137
MEAN	57.8	97.2	299	289	233	505	442	839	402	53.3	29.6	37.9
MAX	62	152	1,050	1,100	648	879	668	1,770	807	113	34	67
MIN	53	62	54	94	145	353	303	415	137	32	26	26
AC-FT	3,560	5,790	18,400	17,750	12,950	31,050	26,300	51,570	23,900	3,270	1,820	2,260

CAL YR 1972 TOTAL 161,130 MEAN 440 MAX 2,330 MIN 35 AC-FT 319,600
WTR YR 1973 TOTAL 100,135 MEAN 274 MAX 1,770 MIN 26 AC-FT 198,600

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-24	0600	6.16	1,650	5-25	0600	6.90	2,290
1-16	2000	6.06	1,800				

13290450 Snake River at Hells Canyon Dam, Idaho-Oregon State line

LOCATION.--Lat 45°15'05", long 116°41'50", in SE¼SE¼ sec.33, T.3 S., R.49 E. (Willamette meridian, unsurveyed), Wallowa County, Wallowa National Forest, on left bank 0.2 mi (0.3 km) upstream from Hells Canyon Creek, 0.4 mi (0.6 km) downstream from Deep Creek, 0.6 mi (1.0 km) downstream from Hells Canyon Dam, 15.5 mi (24.9 km) northeast of Homestead, Oreg., and at mile 247.0 (397.4 km).

DRAINAGE AREA.--73,300 sq mi (190,000 sq km), approximately.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft (426.720 m) above mean sea level (levels by Idaho Power Co.).

AVERAGE DISCHARGE.--8 years, 21,310 cfs (603.5 cu m/s), 15,440,000 acre-ft/yr (19,000 cu hm/yr).

EXTREMES.--Current year: Maximum discharge, 31,600 cfs (895 cu m/s) Jan. 7 (gage height, 72.14 ft or 21.988 m); minimum, 4,890 cfs (138 cu m/s) Mar. 25 (gage height, 62.34 ft or 19.001 m); minimum daily discharge, 6,380 cfs (181 cu m/s) Mar. 24.

Period of record: Maximum discharge, 75,800 cfs (2,150 cu m/s) Apr. 15, 1971 (gage height, 81.55 ft or 24.856 m); minimum, 1,580 cfs (44.7 cu m/s) Mar. 19, 1967 (gage height, 59.9 ft or 18.26 m); minimum daily, 4,950 cfs (140 cu m/s) May 26, 1968.

REMARKS.--Records good. Flow regulated by many reservoirs above station with a total usable capacity of more than 10,000,000 acre-feet (12,300 cu hm), the most effective of which is Brownlee Reservoir 38 mi (6 km) upstream (see sta 13289700). Diurnal fluctuations caused by Hells Canyon powerplant. Diversions above station for irrigation of about 3,820,000 acres (1,550,000 sq hm) of which 742,000 acres (300,000 sq hm) are by withdrawals from ground water (1966 determination). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

63.0	5,940	70.0	23,600
64.0	7,710	73.0	35,000
66.0	11,900	76.0	48,100
68.0	17,000	81.0	72,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,500	19,700	23,100	27,100	27,700	27,800	16,500	15,600	15,500	9,010	10,300	10,300
2	18,900	21,300	20,000	27,900	27,600	27,600	18,400	16,200	14,400	9,010	9,930	9,510
3	20,000	21,600	19,700	27,900	27,700	26,200	18,500	16,300	11,900	9,130	9,950	9,510
4	18,800	19,900	25,300	28,600	27,500	24,900	18,200	16,100	17,200	9,150	9,660	12,700
5	18,000	21,300	24,800	28,300	27,500	27,300	18,200	15,600	15,900	9,200	9,380	14,600
6	19,500	23,700	24,800	29,000	26,300	25,500	18,700	13,500	16,200	9,280	9,550	14,900
7	23,000	26,000	26,100	29,200	26,100	27,200	18,900	15,200	15,700	9,090	9,450	14,700
8	23,100	27,500	25,300	31,200	25,700	26,800	17,500	16,900	14,900	9,050	11,200	11,700
9	23,700	27,500	26,200	28,300	25,300	27,700	18,300	16,200	11,300	11,000	12,600	12,900
10	25,600	28,000	25,200	26,900	24,400	26,500	17,000	15,700	10,300	11,700	11,900	13,200
11	27,000	26,900	25,000	26,500	24,900	25,500	15,100	14,800	10,900	10,900	10,900	13,700
12	25,300	26,000	25,100	25,100	24,900	24,400	14,900	11,800	11,700	8,190	9,470	12,700
13	23,300	27,800	24,900	25,600	26,700	23,700	14,900	10,500	13,300	8,070	12,000	13,800
14	23,600	23,500	24,600	22,700	26,500	24,100	15,300	13,700	11,700	8,140	11,700	13,100
15	22,900	23,400	25,800	26,700	27,700	22,100	15,100	14,800	11,600	8,110	11,000	10,900
16	24,200	24,100	25,000	26,500	28,800	19,300	15,200	16,600	12,000	8,050	11,600	9,890
17	20,500	24,100	24,000	28,000	28,900	16,500	15,200	16,600	12,300	8,070	11,300	13,100
18	22,000	22,900	24,200	28,400	28,800	16,000	17,500	14,300	14,900	8,050	9,400	11,600
19	23,500	20,800	25,300	28,300	28,800	23,000	20,900	11,000	14,800	8,070	9,470	14,200
20	25,900	23,600	26,600	28,200	26,000	24,500	21,300	10,300	13,000	7,980	9,400	13,900
21	24,700	23,700	26,300	27,900	26,300	22,400	21,500	13,600	13,800	7,900	9,640	16,400
22	25,700	24,300	26,900	28,400	25,400	15,100	21,000	11,300	15,900	7,840	11,900	14,200
23	25,800	22,700	25,900	27,700	23,200	9,960	20,500	12,100	12,400	7,880	11,600	14,600
24	25,200	24,400	25,500	28,000	17,900	6,380	20,300	14,600	10,200	7,900	10,200	15,300
25	23,300	23,100	23,200	28,300	17,800	12,000	20,300	15,000	15,400	8,090	10,000	16,200
26	23,900	23,000	26,300	28,400	23,600	21,500	18,800	11,800	17,000	8,950	9,990	17,200
27	22,000	25,300	27,600	27,600	24,600	19,700	17,300	10,300	16,600	11,100	9,930	17,400
28	19,500	24,200	28,600	27,000	25,900	20,200	14,000	10,100	16,900	10,600	9,570	16,400
29	19,100	24,600	26,700	28,000	-------	17,900	14,000	15,500	15,500	8,690	9,720	17,800
30	18,700	24,600	28,100	27,500	-------	17,400	16,000	15,700	10,500	9,260	9,550	16,200
31	18,900	-------	27,700	28,000	-------	18,500	-------	17,600	-------	10,600	9,530	-------
TOTAL	693,100	719,500	783,800	858,000	722,500	667,640	529,300	439,300	413,700	278,110	321,790	412,610
MEAN	22,360	23,980	25,280	27,680	25,800	21,540	17,640	14,170	13,790	8,971	10,380	13,750
MAX	27,000	28,000	28,600	31,200	28,900	27,800	21,500	17,600	17,200	11,700	12,600	17,800
MIN	17,500	19,700	19,700	22,700	17,000	6,380	14,000	10,100	10,200	7,840	9,380	9,510
AC-FT	1,375M	1,427M	1,555M	1,702M	1,433M	1,324M	1,050M	871,400	820,600	551,600	638,300	818,400

CAL YR 1972 TOTAL 10,885,650 MEAN 29,740 MAX 73,100 MIN 10,200 AC-FT 21,590,000
WTR YR 1973 TOTAL 6,841,350 MEAN 18,740 MAX 31,200 MIN 6,380 AC-FT 13,570,000

13292000 IMNAHA RIVER AT IMNAHA, OREG.

LOCATION.--Lat 45°33'45", long 116°50'00", in SW¼ sec.16, T.1 N., R.48 E., Wallowa County, on left bank at Imnaha, 0.3 mi (0.5 km) downstream from Big Sheep Creek, and at mile 19.3 (31.1 km).

DRAINAGE AREA.--622 mi^2 (1,611 km^2).

PERIOD OF RECORD.--June 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,941.14 ft (591.659 m) above mean sea level. Prior to Aug. 6, 1934, nonrecording gage at site 0.25 mi (0.40 km) upstream at different datum. Aug. 6-31, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--45 years, 506 ft^3/s (14.3 m^3/s), 366,600 acre-ft/yr (452 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,920 ft^3/s (54.4 m^3/s) May 25, gage height, 4.31 ft (1.314 m); minimum, 54 ft^3/s (1.53 m^3/s) Dec. 6, 7, but may have been less during period of ice effect.

Period of record: Maximum discharge, 6,650 ft^3/s (188 m^3/s) May 19, 1957, gage height, 6.80 ft (2.073 m), from rating curve extended above 3,300 ft^3/s (93.5 m^3/s); minimum observed, 16 ft^3/s (0.45 m^3/s) Nov. 22, 1931, result of freezeup; minimum daily, 25 ft^3/s (0.71 m^3/s) Nov. 22, 23, 1931.

REMARKS.--Records excellent. No regulation. Diversions for irrigation above station. Water is diverted from Big Sheep Creek and tributaries above station for irrigation in Wallowa River basin.

REVISIONS (WATER YEARS).--WSP 833: 1938. WSP 1397: 1929, 1932(M), 1949. WSP 1737: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	142	141	146	146	279	277	692	1,100	505	159	116
2	145	141	142	149	144	314	265	699	960	458	157	114
3	144	140	140	129	146	286	251	865	852	438	164	113
4	142	172	115	109	146	269	260	1,030	772	429	175	111
5	141	189	100	83	146	255	327	1,060	775	424	169	108
6	140	158	81	85	144	237	386	1,080	865	407	158	105
7	139	146	80	84	136	230	378	1,030	986	384	152	112
8	138	150	80	83	131	224	357	1,130	1,060	359	149	128
9	139	145	78	85	131	220	368	1,120	1,160	348	142	117
10	150	145	82	100	139	224	379	1,000	925	336	153	111
11	172	144	88	120	139	220	441	906	846	325	152	108
12	162	143	96	150	134	208	566	911	809	308	142	106
13	150	143	98	189	131	204	764	1,030	832	290	137	104
14	147	143	110	201	129	195	800	1,200	865	278	133	109
15	165	142	120	227	131	186	717	1,400	753	271	128	117
16	152	141	130	430	129	183	646	1,540	678	265	127	112
17	148	143	140	588	131	204	598	1,680	646	254	124	110
18	144	146	150	407	131	189	536	1,740	578	240	123	109
19	143	148	170	328	119	198	494	1,630	541	236	123	116
20	142	132	190	255	122	204	447	1,560	545	251	120	164
21	140	125	208	241	127	269	409	1,270	595	250	117	152
22	139	103	283	192	134	279	420	1,100	693	237	118	135
23	138	114	297	204	146	276	468	1,060	738	221	117	133
24	135	137	272	206	141	279	486	1,220	665	208	117	138
25	136	145	224	208	160	304	540	1,620	635	201	123	162
26	136	180	207	189	177	355	643	1,200	632	196	125	144
27	136	177	195	124	189	363	827	990	654	186	120	133
28	136	143	183	130	220	335	913	898	680	180	117	126
29	142	145	160	140	------	318	813	896	630	172	116	121
30	138	144	136	150	------	296	742	931	571	168	112	119
31	131	------	160	165	------	293	------	1,090	------	163	116	------
TOTAL	4,458	4,366	4,656	5,895	3,999	7,896	15,516	35,578	23,021	8,986	4,183	3,652
MEAN	144	146	150	190	143	255	517	1,148	767	290	135	122
MAX	172	189	297	588	220	363	913	1,740	1,160	505	175	166
MIN	131	103	78	83	119	183	251	692	541	163	112	106
AC-FT	8,840	8,660	9,240	11,690	7,930	15,660	30,780	70,570	45,660	17,820	8,300	7,240

CAL YR 1972 TOTAL 208,956 MEAN 571 MAX 2,570 MIN 78 AC-FT 414,500
WTR YR 1973 TOTAL 122,206 MEAN 335 MAX 1,740 MIN 78 AC-FT 242,400

PEAK DISCHARGE (BASE, 1,600 CFS).--May 18 (0630) 1,910 cfs (4.30 ft); May 25 (0530) 1,920 cfs (4.31 ft).

13318800 GRANDE RONDE RIVER AT HILGARD, OREG.

LOCATION.--Lat 45°20'21", long 118°14'35", in NE¼NE¼ sec.1, T.3 S., R.36 E., Union County, on left bank 8.8 mi (14.2 km) northwest of La Grande, 1.6 mi (2.6 km) upstream from Fivepoint Creek, and at mile 171.3 (275.6 km).

DRAINAGE AREA.--555 mi² (1,437 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,993.62 ft (912.455 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 272 ft³/s (7.70 m³/s), 197,100 acre-ft/yr (243 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 611 ft³/s (17.3 m³/s) May 16, gage height, 3.64 ft (1.109 m); maximum gage height, 7.38 ft (2.249 m) Jan. 16 (ice jam); minimum discharge, 9.6 ft³/s (0.27 m³/s) Aug. 17, 18, 23.

Period of record: Maximum discharge, 4,740 ft³/s (134 m³/s) Mar. 13, 1972, gage height, 7.18 ft (2.188 m); maximum gage height, 9.18 ft (2.798 m) Jan. 18, 1971 (ice jam); minimum discharge, 9.6 ft³/s (0.27 m³/s) Aug. 17, 18, 23, 1973.

Flood of Jan. 30, 1965, reached a stage of about 9 ft (2.74 m), from floodmark, discharge not determined.

REMARKS.--Records excellent except those for December and January, which are fair. Slight regulation by city of La Grande reservoir on Beaver Creek, capacity, about 900 acre-ft (1.11 hm³). Diversions for irrigation above station. Since 1909, city of La Grande has diverted about 3 ft³/s (0.08 m³/s) from Beaver Creek above station for domestic water supply.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	41	59	101	80	243	228	279	186	34	12	14
2	34	46	68	92	96	236	201	277	165	33	12	14
3	33	50	51	60	99	215	201	300	152	32	12	14
4	32	52	35	66	72	212	209	413	140	30	13	13
5	32	63	24	72	71	202	243	457	130	29	15	12
6	31	51	27	72	71	193	269	443	118	28	14	12
7	31	47	25	52	69	189	247	415	111	28	13	15
8	31	47	21	54	64	189	236	474	105	27	13	18
9	32	46	18	50	63	188	247	461	99	25	12	20
10	39	43	20	72	65	199	264	417	95	24	13	17
11	48	42	23	80	68	211	293	377	88	23	13	15
12	50	44	27	96	66	184	340	374	83	22	13	14
13	42	43	25	120	61	188	404	403	80	21	12	14
14	38	41	31	170	64	169	394	444	80	21	11	14
15	38	41	35	250	70	161	347	481	73	20	11	14
16	39	40	45	300	79	169	331	547	71	19	10	15
17	36	40	50	441	77	203	354	511	78	18	9.7	14
18	35	42	70	336	74	171	319	478	82	17	9.9	15
19	34	39	100	259	70	205	302	428	74	17	10	17
20	34	38	150	216	72	214	283	383	64	19	10	21
21	34	32	280	198	72	240	263	322	58	20	10	22
22	34	16	400	162	70	234	264	289	52	20	10	20
23	34	14	290	157	77	210	283	263	50	19	10	20
24	33	23	280	163	79	213	272	286	51	18	11	27
25	32	48	213	143	85	231	273	353	50	17	13	41
26	33	136	183	121	108	248	291	273	51	16	15	36
27	33	121	173	78	134	229	347	238	48	15	17	26
28	33	78	157	100	182	213	356	218	43	15	15	23
29	36	72	127	100	------	196	326	202	39	14	14	21
30	33	51	113	90	------	195	301	191	36	13	13	20
31	30	------	117	95	------	244	------	196	------	13	13	------
TOTAL	1,089	1,487	3,237	4,366	2,258	6,394	8,688	11,193	2,552	667	379.6	558
MEAN	35.1	49.6	104	141	80.6	206	290	361	85.1	21.5	12.2	18.6
MAX	50	136	400	441	182	248	404	547	186	34	17	41
MIN	30	14	18	50	61	161	201	191	36	13	9.7	12
AC-FT	2,160	2,950	6,420	8,660	4,480	12,680	17,230	22,200	5,060	1,320	753	1,110

CAL YR 1972 TOTAL 154,256.6 MEAN 421 MAX 3,860 MIN 14 AC-FT 306,000
WTR YR 1973 TOTAL 42,868.6 MEAN 117 MAX 547 MIN 9.7 AC-FT 85,030

PEAK DISCHARGE (BASE, 1,700 CFS).--No peak above base.

13319000 GRANDE RONDE RIVER AT LA GRANDE, OREG.

LOCATION.--Lat 45°20'47", long 118°07'26", in NW¼SE¼ sec.36, T.2 S., R.37 E., Union County, on right bank 1.8 mi (2.9 km) northwest of La Grande, 5.7 mi (9.2 km) downstream from Fivepoint Creek, and at mile 164.0 (263.9 km).

DRAINAGE AREA.--678 mi² (1,756 km²).

PERIOD OF RECORD.--October 1903 to September 1915, February 1918 to September 1923, October 1925 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "at Hilgard" 1903-15.

GAGE.--Water-stage recorder. Datum of gage is 2,826.25 ft (861.441 m) above mean sea level. Nov. 6, 1903, to Sept. 30, 1915, nonrecording gage at site 5.5 mi (8.8 km) upstream at various datums. Feb. 16, 1918, to June 28, 1923, and Oct. 1, 1925, to Nov. 23, 1931, nonrecording gage at site 0.7 mi (1.1 km) downstream at various datums. Nov. 24, 1931, to Oct. 8, 1965, water-stage recorder at site 0.3 mi (0.5 km) upstream at datum 4.61 ft (1.405 m) higher.

AVERAGE DISCHARGE.--65 years, 376 ft³/s (10.6 m³/s), 272,400 acre-ft/yr (336 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,100 ft³/s (31.2 m³/s) Dec. 22, gage height, 4.12 ft (1.256 m); maximum gage height, 5.18 ft (1.579 m), backwater from ice; minimum discharge, 9.0 ft³/s (0.25 m³/s) Aug. 24.

Period of record: Maximum discharge, 14,100 ft³/s (399 m³/s) Jan. 30, 1965, gage height, 11.44 ft (3.487 m), site and datum then in use, from rating curve extended above 7,200 ft³/s (204 m³/s); minimum, 3.9 ft³/s (0.11 m³/s) Aug. 26, 1940.

REMARKS.--Records good except those for December and January, which are poor. Since 1915, slight regulation by city of La Grande reservoir on Beaver Creek, capacity, about 900 acre-ft (1.11 hm³). Diversions for irrigation above station. Since 1909, city of La Grande has diverted about 3 ft³/s (0.08 m³/s) from Beaver Creek above station for domestic water supply.

REVISIONS (WATER YEARS).--WSP 768: 1933. WSP 1397: 1904-11, 1913, 1915, 1919-20, 1922-23, 1926, 1929-31, 1936-37, 1939, 1942. WSP 1737: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	42	66	124	125	296	274	332	208	39	12	15
2	38	51	82	120	137	292	241	326	183	39	12	15
3	38	58	66	72	131	272	241	358	169	37	12	15
4	35	58	37	76	121	265	250	503	156	33	12	15
5	35	73	28	82	112	253	287	554	143	32	14	14
6	34	65	33	82	102	242	325	531	133	30	14	13
7	34	55	31	62	95	236	301	500	125	30	13	16
8	34	55	26	62	88	237	288	567	118	30	13	19
9	35	55	23	58	84	237	300	549	112	28	12	22
10	40	50	25	80	86	252	318	496	108	27	13	20
11	53	49	27	100	91	268	355	447	100	24	13	17
12	56	51	33	130	83	236	410	437	95	22	14	16
13	48	50	31	170	84	237	515	465	91	22	12	15
14	43	47	35	220	81	211	506	508	90	21	11	15
15	41	47	41	300	93	200	446	548	86	20	11	16
16	43	47	52	400	96	208	418	611	83	20	10	16
17	41	46	60	582	104	244	445	580	92	19	10	16
18	39	48	86	450	100	207	399	543	99	18	11	17
19	38	47	130	341	91	250	377	486	90	18	11	21
20	38	44	199	270	93	254	354	432	79	18	11	23
21	38	39	374	244	93	270	328	367	70	20	11	28
22	38	24	524	201	91	277	320	330	64	21	11	25
23	37	17	403	204	100	269	340	299	60	17	11	26
24	37	27	356	215	106	254	336	319	60	18	11	32
25	36	53	274	198	117	274	335	303	59	17	14	63
26	37	157	240	102	137	296	357	308	60	17	17	50
27	37	163	227	102	168	277	421	260	60	16	18	37
28	37	99	202	137	225	290	439	267	56	15	17	30
29	40	99	168	130	------	237	390	220	68	16	19	27
30	39	68	155	120	------	236	360	216	62	16	19	28
31	35	------	160	130	------	291	------	215	------	13	16	------
TOTAL	1,213	1,778	4,160	5,623	3,036	7,826	10,680	12,960	2,937	709	385	669
MEAN	39.1	59.3	134	181	108	252	356	418	97.9	22.9	12.4	22.3
MAX	56	163	524	582	225	296	515	611	208	39	19	63
MIN	34	17	23	58	81	200	241	215	62	13	10	13
AC-FT	2,410	3,530	8,250	11,150	6,020	15,520	21,180	25,710	5,830	1,410	764	1,330

CAL YR 1972 TOTAL 208,867 MEAN 571 MAX 5,230 MIN 17 AC-FT 414,300
WTR YR 1973 TOTAL 52,035 MEAN 143 MAX 611 MIN 10 AC-FT 103,200

Peak discharge (base, 1,100 ft³/s).--No peak above base.

13320000 CATHERINE CREEK NEAR UNION, OREG.

LOCATION.--Lat 45°09'20", long 117°46'26", in NW¼SE¼ sec.2, T.5 S., R.40 E., Union County, on right bank 3.0 mi (4.8 km) downstream from Little Catherine Creek, 5.5 mi (8.8 km) southeast of Union, and at mile 25.4 (40.9 km).

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--May 1906 to May 1907 (gage heights only), August 1911 to December 1912, March to September 1915, February 1918 to September 1919, October 1925 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 3,081.76 ft (939.320 m) above mean sea level (Oregon State Highway Department bench mark). Prior to Nov. 28, 1938, nonrecording gage at several sites within 1.8 mi (2.9 km) of present site at various datums. Nov. 28, 1938, to May 16, 1939, water-stage recorder at site 400 ft (122 m) downstream at datum 4.29 ft (1.308 m) lower.

AVERAGE DISCHARGE.--50 years (1911-12, 1918-19, 1925-73), 118 ft³/s (3.34 m³/s), 85,490 acre-ft/yr (105 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 490 ft³/s (13.9 m³/s) Jan. 16, gage height, 2.46 ft (0.750 m); minimum, 14 ft³/s (0.40 m³/s) Dec. 4.
Period of record: Maximum discharge, 1,740 ft³/s (49.3 m³/s) May 27, 1948, gage height, 4.57 ft (1.393 m); minimum, 6.5 ft³/s (0.18 m³/s) Feb. 4, 1955, result of freezeup; minimum daily, 8 ft³/s (0.23 m³/s) Nov. 7, 1925.

REMARKS.--Records good except those for winter periods, which are fair. No regulation. Several small diversions for irrigation above station. Since 1937, diversion to Big Creek in Powder River basin provides a small part of the water used for irrigation in that basin.

REVISIONS (WATER YEARS).--WSP 1397: 1912-13, 1919, 1926, 1928-33, 1937, 1939, 1940(M), 1941-43, 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	31	39	34	28	54	47	132	230	60	26	19
2	29	34	38	32	30	54	44	141	200	57	26	19
3	29	33	33	30	30	52	43	171	181	53	26	18
4	28	55	23	29	31	52	48	189	166	51	26	18
5	27	46	21	28	32	50	62	192	161	49	25	17
6	27	33	24	27	31	47	73	200	166	49	25	17
7	27	32	23	26	30	47	70	187	173	47	26	26
8	27	34	21	23	29	45	70	212	176	45	25	25
9	28	30	19	21	28	45	76	195	176	43	26	21
10	33	31	20	27	29	47	81	181	156	40	26	20
11	32	30	21	40	29	43	91	173	141	40	26	19
12	29	29	24	52	28	42	112	189	132	39	23	18
13	29	29	23	70	29	41	148	230	132	37	22	18
14	30	28	24	90	29	39	148	281	132	36	22	18
15	32	28	27	130	30	38	137	330	119	35	21	19
16	30	28	30	171	29	39	123	377	110	35	21	18
17	29	29	35	112	30	42	117	410	115	34	20	17
18	29	29	40	91	30	41	100	414	102	33	21	18
19	28	27	45	76	32	41	91	387	93	33	20	20
20	28	26	70	65	33	43	83	362	86	30	19	31
21	27	21	120	58	32	44	98	306	86	36	19	22
22	27	19	95	48	37	44	86	285	87	33	19	23
23	27	21	80	48	31	42	90	276	80	33	19	30
24	26	26	68	48	32	44	97	330	85	31	20	44
25	27	31	60	46	36	53	115	336	61	30	26	45
26	28	151	56	25	36	62	137	276	70	29	25	36
27	27	67	49	25	38	42	163	233	71	29	22	30
28	27	53	45	28	43	58	168	212	70	29	28	23
29	29	46	39	25	------	56	151	266	66	27	28	25
30	26	42	33	27	------	61	161	212	63	26	20	23
31	30	------	35	29	------	53	------	265	------	26	19	------
TOTAL	878	1,117	1,276	1,581	873	1,476	2,983	7,656	3,723	1,181	697	736
MEAN	28.4	37.2	41.2	51.0	31.2	47.6	99.4	247	124	38.1	22.5	24.5
MAX	33	151	120	171	43	62	168	414	230	60	26	45
MIN	26	19	19	21	28	38	43	132	61	26	19	17
AC-FT	1,740	2,220	2,530	3,140	1,730	2,930	5,920	15,190	7,380	2,340	1,380	1,460

CAL YR 1972 TOTAL 57,043 MEAN 156 MAX 1,150 MIN 19 AC-FT 113,100
WTR YR 1973 TOTAL 24,306 MEAN 66.6 MAX 414 MIN 17 AC-FT 48,210

PEAK DISCHARGE (BASE, 500 CFS).--No peak above base.

13323500 GRANDE RONDE RIVER NEAR ELGIN, OREG.

LOCATION.--Lat 45°30'45", long 117°55'35", in NW¼NW¼ sec.3, T.1 S., R.39 E., Union County, on right bank 700 ft (213 m) upstream from abandoned highway bridge, 1.5 mi (2.4 km) downstream from Willow Creek, 3.6 mi (5.8 km) south of Elgin, and at mile 104.2 (167.7 km).

DRAINAGE AREA.--1,250 mi^2 (3,240 km^2), approximately.

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,660.31 ft (810.862 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 642 ft^3/s (18.2 m^3/s), 465,100 acre-ft/yr (573 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Jan. 18, gage height, 5.07 ft (1.545 m); no flow Aug. 20-24.

Period of record: Maximum discharge, 6,480 ft^3/s (184 m^3/s) Feb. 2, 1965, gage height, 13.79 ft (4.203 m); no flow Aug. 20-24, 1973.

Flood in May 1948 reached an elevation of 2,672.9 ft (814.70 m) on Corps of Engineers gage at bridge 700 ft (213 m) downstream, discharge, 5,690 ft^3/s (161 m^3/s), result of discharge measurement.

Floods in 1894 and 1917 were much higher, based on Corps of Engineers flood profiles.

REMARKS.--Records excellent. No regulation. Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	93	182	246	287	343	414	531	444	31	3.3	.49
2	80	101	169	226	251	414	393	489	432	34	3.9	.41
3	83	111	140	200	246	423	370	477	408	33	4.9	.28
4	95	122	116	180	253	414	361	531	378	25	6.9	.41
5	92	127	110	160	249	408	370	662	328	19	7.3	.58
6	86	137	98	150	256	390	408	735	275	15	6.4	.41
7	81	124	88	140	232	387	438	739	219	16	4.9	.49
8	80	122	70	140	226	381	435	746	188	16	4.2	1.3
9	80	121	68	150	215	370	426	798	177	14	2.7	2.2
10	87	116	70	160	219	381	432	781	175	10	2.7	2.0
11	92	114	72	182	237	423	456	732	184	7.3	1.7	1.7
12	101	113	74	210	230	417	492	679	161	6.0	1.3	2.0
13	117	113	78	432	224	396	579	651	142	5.6	.58	2.0
14	114	111	88	576	215	378	655	672	144	6.0	.28	2.0
15	111	108	94	561	213	353	665	721	139	5.2	.15	2.7
16	108	114	106	662	219	335	641	809	133	8.3	.09	2.2
17	108	119	124	826	224	343	655	892	148	5.6	.03	2.0
18	106	117	144	992	230	356	648	880	165	4.2	.03	2.7
19	105	116	210	848	219	348	618	860	173	3.9	.03	6.4
20	101	111	323	658	219	356	585	830	169	3.9	0	12
21	97	108	555	546	215	378	546	795	140	5.6	0	14
22	95	101	561	438	208	402	507	742	121	6.4	0	14
23	92	84	760	414	204	396	501	672	98	6.4	0	15
24	92	84	868	348	208	384	504	627	67	7.3	0	22
25	90	89	721	393	215	387	483	683	45	6.9	.06	30
26	89	146	594	367	230	411	486	700	61	6.0	.15	27
27	90	249	516	306	253	429	495	672	71	4.5	.12	22
28	90	256	465	263	294	420	555	630	59	3.6	.12	22
29	92	237	384	289	------	402	585	564	47	3.3	.09	25
30	93	217	311	287	------	373	570	495	31	3.0	.28	26
31	93	------	294	304	------	390	------	447	------	3.3	.49	------
TOTAL	2,917	3,881	8,453	11,654	6,491	11,988	15,273	21,242	5,322	325.3	52.70	261.27
MEAN	94.1	129	273	376	232	387	509	685	177	10.5	1.70	8.71
MAX	117	256	868	992	294	429	665	892	444	34	7.3	30
MIN	77	84	68	140	204	335	361	447	31	3.0	0	.28
AC-FT	5,790	7,700	16,770	23,120	12,870	23,780	30,290	42,130	10,560	645	105	518

CAL YR 1972 TOTAL 360,659.00 MEAN 985 MAX 5,460 MIN 18 AC-FT 715,400
WTR YR 1973 TOTAL 87,860.27 MEAN 241 MAX 992 MIN 0 AC-FT 174,300

13325000 EAST FORK WALLOWA RIVER NEAR JOSEPH, OREG.

LOCATION.--Lat 45°16'20", long 117°12'35", in NE¼ sec.29, T.3 S., R.45 E., Wallowa County, on left bank 0.2 mi (0.3 km) upstream from confluence with West Fork, 1.0 mi (1.6 km) upstream from Wallowa Lake, 5.5 mi (8.8 km) south of Joseph, and at mile 55.0 (88.5 km).

DRAINAGE AREA.--10.3 mi² (26.7 km²).

PERIOD OF RECORD.--July 1924 to current year. Prior to October 1952, records published separately as East Fork Wallowa River near Joseph and Wallowa Falls powerplant tailrace near Joseph.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,517.69 ft (1,376.992 m) above mean sea level (Pacific Power & Light Co. bench mark). Prior to Apr. 8, 1950, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--49 years, 21.6 ft³/s (0.61 m³/s), 28.48 in/yr (723 mm/yr), 15,650 acre-ft/yr (19.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 52 ft³/s (1.47 m³/s) June 9; minimum daily, 9.5 ft³/s (0.27 m³/s) Apr. 16.
Period of record: Maximum discharge, 450 ft³/s (12.7 m³/s) July 25, 1937 (no flow in powerplant tailrace), from rating curve extended above 80 ft³/s (2.27 m³/s); minimum daily, 6.6 ft³/s (0.19 m³/s) Feb. 13, 1927.

REMARKS.--Records good except those for winter periods, which are poor. All records represented herein include flow in Wallowa Falls powerplant tailrace of Pacific Power & Light Co. Most of low flow is diverted at dam 1.5 mi (2.4 km) upstream into a conduit 1.0 mi (1.6 km) above Wallowa Falls powerhouse and discharged into West Fork 0.4 mi (0.6 km) below powerhouse.

REVISIONS (WATER YEARS).--WSP 1247: 1931, 1937(M), 1948-49, records for river station; 1948, records for tailrace station. WSP 1737: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	13	14	13	11	10	11	12	37	31	16	12
2	16	14	13	13	11	11	11	13	35	29	15	12
3	16	16	14	12	11	11	11	15	33	28	15	12
4	16	16	12	12	11	11	11	14	32	28	16	12
5	16	16	12	11	11	11	11	14	33	28	16	12
6	15	15	11	10	11	11	11	14	36	28	15	12
7	15	15	11	10	11	11	11	15	38	27	15	13
8	16	15	10	9.6	11	11	11	16	42	26	15	13
9	16	15	10	9.6	11	11	11	15	48	25	14	12
10	18	15	10	10	11	11	11	14	47	25	15	12
11	18	15	10	11	11	11	10	14	41	24	15	12
12	16	15	11	12	11	11	11	16	40	23	14	12
13	16	14	11	14	11	11	11	18	40	23	14	12
14	17	15	12	13	11	11	10	22	41	22	14	13
15	16	15	12	14	11	11	9.8	25	37	22	14	13
16	16	15	12	13	11	11	9.5	28	35	21	13	12
17	15	15	12	12	11	11	9.9	31	33	20	13	12
18	16	15	13	12	11	11	11	33	30	20	13	12
19	16	13	14	12	11	11	11	33	28	28	13	15
20	16	13	14	11	11	11	10	33	28	20	13	14
21	15	13	18	11	11	11	10	29	29	20	13	13
22	15	12	17	11	11	11	11	29	35	19	13	13
23	15	13	16	11	11	11	11	31	38	19	13	13
24	15	14	16	11	11	11	11	39	36	18	13	13
25	15	15	15	12	11	11	11	36	36	18	13	13
26	15	18	15	11	11	11	12	30	36	17	13	13
27	14	15	12	10	11	11	13	28	37	17	13	12
28	15	15	14	10	11	11	13	29	38	17	13	12
29	15	14	14	10	------	11	12	31	37	16	13	12
30	14	14	14	10	------	11	12	33	34	16	13	12
31	14	------	14	11	------	11	------	42	------	16	13	------
TOTAL	484	438	403	352.2	308	340	329.2	752	1.090	691	431	375
MEAN	15.6	14.6	13.0	11.4	11.0	11.0	11.0	24.3	36.3	22.3	13.9	12.5
MAX	18	18	18	14	11	11	13	42	48	31	16	15
MIN	14	12	10	9.6	11	10	9.5	12	28	16	13	12
CFSM	1.51	1.42	1.26	1.11	1.07	1.07	1.07	2.36	3.52	2.17	1.35	1.21
IN.	1.75	1.58	1.46	1.27	1.11	1.23	1.19	2.72	3.94	2.50	1.56	1.35
AC-FT	960	869	799	699	611	674	653	1.490	2.160	1.370	855	744

CAL YR 1972 TOTAL 8.735.0 MEAN 23.9 MAX 117 MIN 10 CFSM 2.32 IN 31.55 AC-FT 17.330
WTR YR 1973 TOTAL 5.993.4 MEAN 16.4 MAX 48 MIN 9.5 CFSM 1.59 IN 21.65 AC-FT 11.890

13326000 WALLOWA LAKE NEAR JOSEPH, OREG.

LOCATION.--Lat 45°20'10", long 117°13'15", in NW¼ sec.5, T.3 S., R.45 E., Wallowa County, at spillway near right end of Wallowa Lake dam on Wallowa River, 1.3 mi (2.1 km) southeast of Joseph, and at mile 50.2 (80.8 km).

DRAINAGE AREA.--50.8 mi^2 (131.6 km^2).

PERIOD OF RECORD.--November 1903 to July 1906 (gage height only), January 1912 to March 1914, May to September 1915 (gage heights and change in contents only), October 1925 to June 1926, December 1926 to current year. Monthend contents only for some periods, published in WSP 1317. November 1903 to March 1905 published as Wallowa River at Joseph. Change in contents for January 1912 to March 1914 and May to September 1915 published with records for Wallowa River at Joseph.

GAGE.--Water-stage recorder. Datum of gage is 4,355.66 ft (1,327.605 m) above mean sea level. Prior to Oct. 1, 1925, nonrecording gage at several sites within 0.5 mi (0.8 km) of present site at different datums. Oct. 1, 1925, to June 30, 1926, Dec. 1, 1926, to May 18, 1961, nonrecording gage near left end of dam at same datum.

EXTREMES.--Current year: Maximum contents, 23,620 acre-ft (29.1 hm^3) May 17, gage height, 22.94 ft (6.992 m); minimum, unknown.
Period of record: Maximum contents observed, 47,830 acre-ft (59.0 hm^3) June 5-7, 1957, gage height, 29.85 ft (9.098 m); minimum observed, 4,790 acre-ft (5.91 hm^3) Oct. 10, 1929, gage height, 3.10 ft (0.945 m).

REMARKS.--Records excellent. Reservoir is formed by concrete dam. Capacity, 42,750 acre-ft (52.7 hm^3) between gage height 0.0 (sill of outlet gates) and 26.8 ft (8.169 m), spillway crest. About 5,300 acre-ft (6.53 hm^3) dead storage above outlet gates, because channel is about 3.4 ft (1.036 m) above outlet gates. Dead storage below outlet gates not known. Records are based on capacities above outlet gates.

REVISIONS.--WSP 1737: Drainage area.

MONTHEND GAGE HEIGHT AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	10.27	15,970	-
Oct. 31	10.31	16,040	+70
Nov. 30	10.80	16,810	+770
Dec. 31	11.67	18,180	+1,370
CAL YR 1972	-	-	-7,060
Jan. 31	12.40	19,340	+1,160
Feb. 28	12.69	19,790	+450
Mar. 31	13.05	20,370	+580
Apr. 30	13.76	21,500	+1,130
May 31	11.64	18,130	-3,370
June 30	9.75	15,160	-2,970
July 31	5.69	8,810	-6,350
Aug. 31	3.87	5,980	-2,830
Sept.30	4.86	7,520	+1,540
WTR YR 1973	-	-	-8,450

13327500 WALLOWA RIVER AT JOSEPH, OREG.

LOCATION.--Lat 45°20'15", long 117°13'35", in NW¼ sec.5, T.3 S., R.45 E., Wallowa County, on left bank 0.2 mi (0.3 km) downstream from Wallowa Lake dam, 1.1 mi (1.8 km) south of Joseph, and at mile 50.0 (80.4 km).

DRAINAGE AREA.--50.9 mi^2 (131.8 km^2).

PERIOD OF RECORD.--November 1903 to August 1907, June 1908 to March 1914, May to September 1915, December 1926 to current year. Monthly discharge only for some periods, published in WSP 1317. Published as "near Joseph" 1911.

GAGE.--Water-stage recorder. Datum of gage is 4,326.86 ft (1,318.827 m) above mean sea level. Nov. 12, 1903, to Sept. 25, 1915, nonrecording gage at several sites at lake outlet or near present site at different datums.

AVERAGE DISCHARGE.--46 years (1927-73), 133 ft^3/s (3.77 m^3/s), 35.48 in/yr (901 mm/yr), 96,360 acre-ft/yr (119 hm^3/yr), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 512 ft^3/s (14.5 m^3/s) May 24, gage height, 3.68 ft (1.122 m); minimum, 2.6 ft^3/s (0.074 m^3/s) Aug. 9.
Period of record: Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) June 10, 1969, gage height, 5.15 ft (1.570 m); no flow at times in some years.

REMARKS.--Records good. Monthly discharge adjusted for storage in Wallowa Lake (see station 13326000) and diversion from Wallowa Lake by Silver Lake ditch. Silver Lake ditch diverts at Wallowa Lake dam for irrigation northeast of Joseph. City of Joseph diverts less than 1.0 ft^3/s (0.028 m^3/s) from Wallowa Lake for municipal use.

REVISIONS (WATER YEARS).--WSP 1397: 1906. WSP 1737: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	31	22	21	24	23	23	27	449	194	139	34
2	42	31	22	17	24	23	26	33	433	200	158	32
3	42	31	22	25	24	23	26	34	421	194	154	33
4	42	31	22	25	24	23	26	34	406	204	145	34
5	42	31	22	25	24	24	26	35	397	202	135	33
6	42	31	22	25	24	24	23	35	388	218	126	34
7	42	31	22	25	24	24	23	35	377	212	117	34
8	42	31	22	25	24	24	23	42	380	220	107	34
9	42	31	22	25	24	24	23	43	375	249	77	34
10	43	31	22	25	24	24	23	48	375	249	83	34
11	43	31	22	25	23	23	23	51	363	251	79	34
12	43	31	21	25	24	23	25	51	363	251	76	30
13	43	31	21	24	24	23	27	51	363	242	70	28
14	43	31	20	24	24	24	27	126	360	236	64	29
15	43	31	20	24	24	25	27	188	350	231	61	36
16	43	31	20	23	24	25	27	251	318	231	54	34
17	43	31	21	23	24	25	26	355	298	238	52	24
18	43	31	21	24	24	25	26	424	295	234	52	21
19	43	30	21	23	24	25	26	456	290	234	49	21
20	43	22	20	24	24	25	26	459	293	247	47	21
21	43	22	23	24	24	23	26	473	283	240	43	21
22	43	22	24	24	24	21	26	470	253	247	43	21
23	43	22	24	24	24	21	26	488	227	227	43	21
24	43	22	24	24	24	21	26	500	208	194	42	21
25	39	22	23	24	24	21	26	500	204	166	42	24
26	32	22	21	24	24	21	26	492	204	145	42	23
27	32	22	21	24	24	21	26	484	206	128	40	23
28	32	22	21	24	23	21	26	477	210	121	39	23
29	32	22	21	24	------	21	27	492	184	114	39	23
30	31	22	21	24	------	21	27	488	186	105	37	23
31	31	------	21	24	------	21	------	477	------	114	37	------
TOTAL	1.252	830	671	741	670	712	764	8.119	9.459	6.338	2.292	837
MEAN	40.4	27.7	21.6	23.9	23.9	23.0	25.5	262	315	204	73.9	27.9
MAX	43	31	24	25	24	25	27	500	449	251	158	36
MIN	31	22	20	17	23	21	23	27	184	105	37	21
AC-FT	2.480	1.650	1.330	1.470	1.330	1.410	1.520	16.100	18.760	12.570	4.550	1.660
MEAN†	49.8	48.1	48.1	48.3	38.2	38.7	50.2	235	330	144	52.4	60.3
CFSM†	.978	.945	.945	.949	.750	.760	.986	4.61	6.48	2.83	1.03	1.18
IN.†	1.13	1.05	1.09	1.09	.78	.88	1.10	5.32	7.23	3.25	1.19	1.32
AC-FT†	3,060	2,860	2,960	2,970	2,120	2,380	2,990	14,450	19,620	8,830	3,220	3,590

CAL YR 1972 TOTAL 51,947 MEAN 142 MAX 639 MIN 20 AC-FT 103,000 MEAN† 152 CFSM† 2.99 IN.† 40.58 AC-FT† 110,140
WTR YR 1973 TOTAL 32,685 MEAN 89.5 MAX 500 MIN 17 AC-FT 64,830 MEAN† 95.4 CFSM† 1.87 IN.† 25.44 AC-FT† 69,050

† Adjusted for change in contents of Wallowa Lake and diversion by Silver Lake ditch.

13329500 HURRICANE CREEK NEAR JOSEPH, OREG.

LOCATION.--Lat 45°20'15", long 117°17'30", in NE¼ sec.3, T.3 S., R.44 E., Wallowa County, on left bank 350 ft (107 m) upstream from intake of Moonshine ditch, 3.5 mi (5.6 km) southwest of Joseph, and at mile 7.5 (12.1 km).

DRAINAGE AREA.--29.6 mi² (76.7 km²).

PERIOD OF RECORD.--April to September 1915, April 1924 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 4,500 ft (1,370 m), by barometer. Apr. 27 to Sept. 3, 1915, nonrecording gage at site 250 ft (76 m) downstream at different datum. Apr. 23, 1924, to June 13, 1933, water-stage recorder at site 150 ft (46 m) downstream at different datum.

AVERAGE DISCHARGE.--49 years, 73.9 ft³/s (2.09 m³/s), 33.90 in/yr (861 mm/yr), 53,540 acre-ft/yr (66.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 395 ft³/s (11.2 m³/s) June 8, gage height, 4.00 ft (1.219 m); minimum daily, 13 ft³/s (0.37 m³/s) Mar. 14, 15, 18, 19.

Period of record: Maximum discharge, 1,110 ft³/s (31.4 m³/s) June 9, 1948, gage height, 3.55 ft (1.082 m); maximum gage height, 4.84 ft (1.475 m) May 31, 1972; minimum discharge, 2.8 ft³/s (0.079 m³/s) Mar. 2, 1955, result of ice jam upstream; minimum daily, 6.0 ft³/s (0.17 m³/s) Jan. 6, Apr. 13, 1945.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1397: 1915, 1925-28. WSP 1737: Drainage area.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	23	21	18	15	14	14	33	240	123	45	24
2	30	24	21	18	15	14	14	37	191	115	45	24
3	29	24	19	17	15	14	14	45	155	120	44	24
4	28	24	17	17	15	14	14	47	152	125	44	23
5	28	24	15	17	15	14	15	44	179	123	44	23
6	28	23	16	17	15	14	15	47	179	113	44	22
7	27	23	17	15	15	14	15	49	285	100	39	25
8	27	23	16	14	15	14	15	57	310	100	38	24
9	28	22	17	16	15	14	15	50	275	100	38	23
10	30	22	17	17	15	14	17	47	195	103	39	22
11	30	22	17	17	15	14	18	47	179	95	38	21
12	29	21	17	17	14	14	21	59	191	85	36	21
13	28	21	17	24	14	14	26	88	209	83	34	21
14	28	21	17	21	14	13	25	128	191	80	34	22
15	28	21	17	19	14	13	24	171	140	80	33	22
16	27	20	17	23	14	14	24	240	120	78	32	21
17	27	20	17	19	14	14	24	285	113	75	32	20
18	26	20	18	18	14	13	23	295	100	69	31	20
19	26	20	20	18	14	13	22	285	95	67	30	31
20	25	18	19	17	14	14	21	245	115	67	29	31
21	25	17	39	17	14	14	20	187	171	63	29	28
22	25	16	32	17	14	14	21	179	218	59	29	27
23	24	17	24	17	14	14	22	195	200	57	28	30
24	24	17	22	17	14	14	22	295	171	55	28	31
25	24	20	21	17	14	14	24	245	163	55	27	32
26	24	36	20	16	14	14	28	167	187	52	27	30
27	24	24	20	16	14	14	34	140	209	52	26	29
28	24	22	19	16	14	14	38	140	191	50	26	28
29	24	21	18	16	------	14	36	155	163	50	25	27
30	23	22	18	15	------	14	34	200	140	47	25	26
31	23	------	18	15	------	14	------	285	------	47	24	------
TOTAL	823	648	603	538	403	430	655	4.487	5.427	2.488	1.043	752
MEAN	26.5	21.6	19.5	17.4	14.4	13.9	21.8	145	181	80.3	33.6	25.1
MAX	30	36	39	24	15	14	38	295	310	125	45	32
MIN	23	16	15	14	14	13	14	33	95	47	24	20
CFSM	.90	.73	.66	.59	.49	.47	.74	4.90	6.11	2.71	1.14	.85
IN.	1.03	.81	.76	.68	.51	.54	.82	5.64	6.82	3.13	1.31	.95
AC-FT	1.630	1.290	1.200	1.070	799	853	1.300	8.900	10.760	4.930	2.070	1.490

CAL YR 1972 TOTAL 29.397 MEAN 80.3 MAX 559 MIN 13 CFSM 2.71 IN 36.94 AC-FT 58.310
WTR YR 1973 TOTAL 18.297 MEAN 50.1 MAX 310 MIN 13 CFSM 1.69 IN 22.99 AC-FT 36.290

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

13330000 LOSTINE RIVER NEAR LOSTINE, OREG.

LOCATION.--Lat 45°26'20", long 117°25'35", in NW¼ sec.34, T.1 S., R.43 E., Wallowa County, on left bank 3.5 mi (5.6 km) south of Lostine and at mile 10.0 (16.1 km).

DRAINAGE AREA.--70.9 mi² (183.6 km²).

PERIOD OF RECORD.--August 1912 to March 1914, April to September 1915, July 1925 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 3,650 ft (1,110 m), by barometer. See WSP 1317 or 1737 for history of changes prior to Dec. 16, 1953.

AVERAGE DISCHARGE.--49 years (1912-13, 1925-73), 195 ft³/s (5.53 m³/s), 141,300 acre-ft per/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,170 ft³/s (33.1 m³/s) May 24, gage height, 4.94 ft (1.506 m); minimum, 15 ft³/s (0.42 m³/s) Dec. 6, but may have been less during periods of ice effect and no gage-height record.

Period of record: Maximum discharge observed, 2,540 ft³/s (71.9 m³/s) May 27, 1913, gage height, 6.60 ft (2.012 m), site and datum then in use; minimum, 7.5 ft³/s (0.21 m³/s) Mar. 2, 1966, result of freezeup; minimum daily, 10 ft³/s (0.28 m³/s) Nov. 28-30, 1936.

REMARKS.--Records excellent except those for winter periods, which are fair. Minam Lake Reservoir, capacity, 440 acre-ft (0.54 hm³), has stored and diverted flow from Minam River since 1917 for irrigation in Lostine River basin. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1397: 1913, 1942. WSP 1737: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	33	33	38	33	33	29	129	766	316	64	30
2	38	37	32	40	32	31	29	141	626	286	62	30
3	38	35	26	29	32	29	29	177	527	286	61	29
4	37	43	24	34	33	29	31	183	488	296	60	28
5	36	42	22	32	33	29	35	181	558	290	62	26
6	35	34	23	29	32	29	37	189	693	263	58	25
7	34	35	22	26	32	28	35	190	836	230	56	31
8	34	36	20	25	30	29	36	220	911	220	53	35
9	34	33	19	26	31	29	39	198	865	216	51	30
10	45	33	20	28	31	29	43	182	651	212	60	27
11	47	32	23	31	31	29	52	173	573	203	54	26
12	42	31	25	33	30	28	68	201	577	178	50	25
13	39	31	23	59	30	28	92	293	623	161	48	25
14	40	30	25	68	29	27	91	435	599	153	47	26
15	44	30	28	55	29	29	86	598	446	148	44	29
16	40	30	31	82	28	28	83	775	373	143	43	27
17	38	30	35	68	28	29	82	897	327	135	42	26
18	36	29	41	59	28	27	76	937	290	126	40	25
19	36	27	50	54	25	28	73	906	275	118	39	38
20	35	25	70	50	27	29	69	822	304	118	37	53
21	34	21	94	50	26	30	67	636	433	111	36	42
22	34	20	92	44	27	30	69	595	569	101	36	37
23	33	20	76	46	27	29	70	628	566	95	35	44
24	32	27	73	44	26	29	72	909	479	90	35	51
25	33	29	57	42	30	30	80	844	471	86	37	57
26	33	82	49	38	29	31	100	583	512	83	35	49
27	31	50	46	34	30	31	132	462	547	80	34	47
28	31	44	43	35	31	30	147	434	532	78	32	49
29	32	37	39	37	------	30	139	480	464	75	31	46
30	31	36	39	37	------	30	135	593	386	71	31	44
31	31	------	39	36	------	30	------	828	------	68	31	------
TOTAL	1,122	1,022	1,239	1,309	830	907	2,126	14,819	16,267	5,036	1,404	1,057
MEAN	36.2	34.1	40.0	42.2	29.6	29.3	70.9	478	542	162	45.3	35.2
MAX	47	82	94	82	33	33	147	937	911	316	64	57
MIN	31	20	19	25	25	27	29	129	275	68	31	25
AC-FT	2,230	2,030	2,460	2,600	1,650	1,800	4,220	29,390	32,270	9,990	2,780	2,100

CAL YR 1972 TOTAL 82,235 MEAN 225 MAX 1,730 MIN 19 AC-FT 163,100
WTR YR 1973 TOTAL 47,138 MEAN 129 MAX 937 MIN 19 AC-FT 93,500

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-17	2200	4.81	1,100	6- 8	2230	4.83	1,120
5-24	2100	4.94	1,170				

13330500 BEAR CREEK NEAR WALLOWA, OREG.

LOCATION.--Lat 45°31'37", long 117°33'05", in NW¼NE¼ sec.34, T.1 N., R.42 E., Wallowa County, on right bank 30 ft (9 m) downstream from road bridge, 3.0 mi (4.8 km) southwest of Wallowa, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--68 mi^2 (176 km^2), approximately.

PERIOD OF RECORD.--April to September 1915, April 1924 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Altitude of gage is 3,250 ft (991 m), by barometer. Apr. 13 to Sept. 16, 1915, nonrecording gage at site 1.0 mi (1.6 km) upstream at different datum. Apr. 22, 1924, to Nov. 2, 1931, water-stage recorder at site 1.5 mi (2.4 km) upstream at different datum.

AVERAGE DISCHARGE.--49 years (1924-73), 113 ft^3/s (3.20 m^3/s), 81,870 acre-ft/yr (101 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 843 ft^3/s (23.9 m^3/s) May 17, gage height, 3.08 ft (0.939 m); minimum, 7.9 ft^3/s (0.22 m^3/s) Sept. 5-7, 12, 13.

Period of record: Maximum discharge, 1,620 ft^3/s (45.9 m^3/s) Apr. 22, 1936, gage height, 3.82 ft (1.164 m), from floodmark, from rating curve extended above 930 ft^3/s (26.3 m^3/s); minimum daily, 3 ft^3/s (0.085 m^3/s) Jan. 20, Feb. 1, 1937.

REMARKS.--Records excellent except those for winter periods, which are poor. No regulation. Diversions for irrigation above station. Water for irrigation in Lostine River basin diverted from Little Bear Creek, a tributary above station, in sec.32, T.1 N., R.43 E.

REVISIONS (WATER YEARS).--WSP 1397: 1915, 1927, 1929-30, 1932, 1936-40, 1945, 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	15	28	41	23	38	33	115	415	89	14	8.9
2	17	17	28	38	22	38	33	122	335	77	14	8.9
3	16	17	24	32	24	37	32	151	265	72	13	8.6
4	16	23	20	27	27	38	33	167	231	67	13	8.2
5	16	26	16	28	30	37	38	170	260	64	13	8.2
6	16	22	17	23	29	36	44	174	325	59	13	7.9
7	16	22	16	21	27	35	45	170	385	52	12	12
8	16	22	15	19	25	35	45	194	415	48	12	11
9	16	21	14	19	23	32	49	174	385	45	12	9.2
10	20	20	15	21	24	37	54	154	290	41	14	8.9
11	21	19	17	24	21	35	67	143	243	38	12	8.6
12	19	19	18	35	19	33	87	164	243	35	12	8.2
13	18	18	17	60	18	33	120	255	247	33	11	7.9
14	19	18	18	116	19	33	122	403	235	30	11	9.5
15	21	18	20	96	20	32	117	549	180	28	10	9.8
16	19	18	22	120	20	32	111	665	154	26	10	8.9
17	18	18	25	118	20	33	106	705	143	25	10	8.6
18	16	18	29	104	18	32	93	655	130	23	10	8.9
19	17	17	35	91	18	35	85	637	127	22	10	11
20	17	16	50	81	19	33	77	565	135	23	9.8	12
21	17	15	110	72	19	35	72	403	177	22	9.5	11
22	16	15	150	67	20	35	74	367	205	20	9.5	11
23	16	16	150	65	22	34	76	397	191	20	9.5	12
24	16	20	130	56	23	34	74	601	164	19	9.5	14
25	16	25	111	51	27	35	79	583	161	18	10	19
26	16	64	91	47	27	37	101	397	164	17	9.8	14
27	15	43	80	40	28	37	135	300	161	16	9.5	13
28	15	37	67	35	30	37	148	260	148	16	9.2	13
29	15	33	55	31	------	36	138	280	125	15	8.9	13
30	14	30	50	27	------	35	127	345	106	15	8.9	13
31	15	------	45	25	------	36	------	471	------	14	8.9	------
TOTAL	524	682	1,483	1,630	642	1,085	2,415	10,736	6,745	1,089	339.0	318.2
MEAN	16.9	22.7	47.8	52.6	22.9	35.0	80.5	346	225	35.1	10.9	10.6
MAX	21	64	150	120	30	38	148	705	415	89	14	19
MIN	14	15	14	19	18	32	32	115	106	14	8.9	7.9
AC-FT	1,040	1,350	2,940	3,230	1,270	2,150	4,790	21,290	13,380	2,160	672	631

CAL YR 1972 TOTAL 54,266.0 MEAN 148 MAX 1,220 MIN 13 AC-FT 107,600
WTR YR 1973 TOTAL 27,688.2 MEAN 75.9 MAX 705 MIN 7.9 AC-FT 54,920

PEAK DISCHARGE (BASE, 600 CFS).--May 17 (2100) 843 cfs (3.08 ft); May 24 (2030) 810 cfs (3.05 ft).

13331500 MINAM RIVER AT MINAM, OREG.
(Hydrologic bench-mark station)

LOCATION.--Lat 45°37'12", long 117°43'32", in SW¼SW¼ sec.29, T.2 N., R.41 E., Wallowa County, on left bank 2.3 mi (3.7 km) downstream from Squaw Creek, 0.3 mi (0.5 km) west of Minam, and at mile 0.3 (0.5 km).

DRAINAGE AREA.--240 mi² (622 km²), approximately.

PERIOD OF RECORD.--June 1912 to March 1914, September 1965 to current year. Monthly discharge only for some periods, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 2,540.48 ft (774.338 m) above mean sea level. June 1912 to March 1914, nonrecording gage at approximately same site at different datum.

AVERAGE DISCHARGE.--9 years, 470 ft³/s (13.3 m³/s), 26.59 in/yr (675 mm/yr), 340,500 acre-ft/yr (419 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,310 ft³/s (65.4 m³/s) May 24, gage height, 4.56 ft (1.390 m); maximum gage height, 4.85 ft (1.478 m) Dec. 21, backwater from ice; minimum discharge, 10 ft³/s (0.28 m³/s) Dec. 6, Jan. 10, result of freezeup.
Period of record: Maximum discharge, 4,910 ft³/s (139 m³/s) June 6, 1970, gage height, 5.91 ft (1.801 m); maximum gage height, 7.3 ft (2.23 m) May 28, 1913, datum then in use; minimum discharge, 10 ft³/s (0.28 m³/s) Dec. 6, 1972, Jan. 10, 1973, result of freezeup.

REMARKS.--Records excellent except those for winter periods, which are poor. No regulation or diversion above statio . Records of chemical analyses, water temperatures, and sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	76	114	150	117	186	132	343	1.450	510	106	59
2	86	92	110	155	121	192	128	367	1.250	456	104	57
3	77	89	95	116	128	180	125	443	1.060	429	100	57
4	76	116	75	88	121	178	125	510	958	420	102	54
5	73	138	27	70	119	172	141	506	972	420	98	53
6	73	102	11	50	113	162	167	545	1.090	398	96	51
7	72	90	15	30	106	156	167	520	1.250	363	94	63
8	71	92	14	20	100	154	164	622	1.360	335	91	81
9	73	85	13	11	102	151	178	575	1.400	319	87	66
10	94	82	15	15	106	169	186	530	1.130	303	91	59
11	101	80	18	12	104	167	212	492	993	295	94	56
12	91	79	22	15	100	156	239	540	951	274	87	53
13	82	76	26	20	98	159	327	724	979	251	81	51
14	80	76	32	56	98	149	339	993	993	236	80	56
15	86	75	38	98	98	144	315	1.330	839	224	76	59
16	83	74	45	178	96	141	288	1.670	730	215	73	56
17	79	76	52	248	98	151	285	1.910	700	203	71	53
18	77	75	80	307	100	139	257	1.990	610	192	71	54
19	75	74	110	288	94	144	245	1.940	580	183	69	63
20	74	65	250	245	94	149	224	1.850	555	183	66	123
21	72	50	600	224	98	154	209	1.460	628	178	65	93
22	71	36	706	180	98	151	215	1.310	797	167	63	87
23	70	38	658	183	106	146	224	1.320	860	156	62	96
24	69	93	718	189	102	144	224	1.740	742	146	62	121
25	68	88	538	169	110	144	239	1.920	718	139	66	189
26	70	295	336	151	113	154	285	1.420	694	135	68	144
27	69	222	284	117	123	154	371	1.140	724	128	65	113
28	69	152	244	125	132	151	416	1.020	754	123	62	108
29	70	130	209	137	------	146	384	1.030	688	119	60	98
30	69	118	185	149	------	139	367	1.140	600	115	59	93
31	61	------	177	141	------	144	------	1.450	------	110	59	------
TOTAL	2.356	2.934	5.817	3.937	2.995	4.826	7.178	33.350	27.055	7.725	2.428	2.366
MEAN	76.0	97.8	188	127	107	156	239	1.076	902	249	78.3	78.9
MAX	101	295	718	307	132	192	416	1.990	1.450	510	106	189
MIN	61	36	11	11	94	139	125	343	555	110	59	51
CFSM	.32	.41	.78	.53	.45	.65	1.00	4.48	3.76	1.04	.33	.33
IN.	.37	.45	.90	.61	.46	.75	1.11	5.17	4.19	1.20	.38	.37
AC-FT	4.670	5.820	11.540	7.810	5.940	9.570	14.240	66.150	53.660	15.320	4.820	4.690

CAL YR 1972 TOTAL 210.395 MEAN 575 MAX 4.130 MIN 11 CFSM 2.40 IN 32.61 AC-FT 417.300
WTR YR 1973 TOTAL 102.967 MEAN 282 MAX 1.990 MIN 11 CFSM 1.18 IN 15.96 AC-FT 204.200

PEAK DISCHARGE (BASE, 1,450 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-18	0100	4.51	2,250	5-31	2400	3.90	1,600
5-24	2230	4.56	2,310	6- 9	0200	3.67	1,570

13332500 GRANDE RONDE RIVER AT RONDOWA, OREG.

LOCATION.--Lat 45°43'36", long 117°46'59", in SW¼NW¼ sec.23, T.3 N., R.40 E., Wallowa County, on right bank at Rondowa, 500 ft (152 m) downstream from Wallowa River, 13 mi (21 km) northeast of Elgin, and at mile 81.4 (131.0 km).

DRAINAGE AREA.--2,555 mi^2 (6,617 km^2).

PERIOD OF RECORD.--October 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,281.87 ft (695.514 m) above mean sea level.

AVERAGE DISCHARGE.--47 years, 2,110 ft^3/s (59.8 m^3/s), 1,529,000 acre-ft/yr (1.89 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,170 ft^3/s (175 m^3/s) Dec. 21, gage height, 4.85 ft (1.478 m); minimum, 220 ft^3/s (6.23 m^3/s) Aug. 22.

Period of record: Maximum discharge, 24,700 ft^3/s (700 m^3/s) Jan. 30, 1965, gage height, 10.93 ft (3.331 m); minimum, 220 ft^3/s (6.23 m^3/s) Aug. 22, 1973.

REMARKS.--Records excellent. Flow slightly regulated by Wallowa Lake (see station 13326000) and small reservoirs. Diversions for irrigation above station, chiefly in vicinity of La Grande, Enterprise, and Wallowa; one transbasin diversion from Sheep Creek in Imnaha River basin for irrigation in Wallowa Valley.

REVISIONS (WATER YEARS).--WSP 1093: 1928-29, 1932-33, 1936, 1938, 1939(M), 1943. WSP 1397: 1927. WSP 1447: 1927.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	640	605	782	980	910	1,590	1,160	1,640	3,640	1,260	310	248
2	619	661	750	950	880	1,570	1,110	1,580	3,170	1,140	305	244
3	612	661	718	782	860	1,470	1,070	1,660	2,770	1,040	305	256
4	612	726	619	734	880	1,410	1,070	1,870	2,430	990	305	244
5	612	800	462	766	870	1,380	1,110	2,010	2,360	990	296	240
6	605	726	400	718	870	1,310	1,200	2,180	2,630	920	296	244
7	605	689	350	640	830	1,280	1,220	2,150	2,970	840	278	283
8	598	689	330	591	790	1,280	1,210	2,340	3,210	774	269	400
9	598	675	320	598	774	1,260	1,210	2,330	3,370	742	274	370
10	682	661	320	726	830	1,430	1,250	2,220	2,680	703	287	360
11	718	647	350	689	870	1,470	1,310	2,070	2,330	654	310	355
12	668	640	380	758	840	1,400	1,470	2,030	2,180	626	296	355
13	668	626	400	1,860	820	1,320	1,760	2,250	2,280	584	292	346
14	661	619	450	2,010	800	1,270	1,930	2,830	2,400	522	283	350
15	682	619	492	1,830	830	1,230	1,860	3,580	2,070	498	265	390
16	661	626	591	3,280	840	1,150	1,830	4,340	1,660	492	256	375
17	647	654	682	3,080	860	1,180	1,870	4,900	1,830	450	260	370
18	633	654	742	2,670	850	1,150	1,770	5,180	1,640	425	256	380
19	626	647	1,170	2,230	810	1,140	1,710	4,920	1,620	410	260	420
20	619	619	1,570	1,830	790	1,190	1,630	4,860	1,540	430	269	510
21	619	591	3,300	1,600	782	1,230	1,540	3,960	1,590	425	244	504
22	605	540	3,350	1,360	782	1,260	1,490	3,490	1,860	410	228	492
23	605	498	3,310	1,270	790	1,220	1,510	3,400	2,090	420	240	494
24	598	558	3,940	1,230	790	1,190	1,490	4,180	1,820	395	265	546
25	598	598	2,540	1,210	910	1,220	1,480	5,120	1,720	390	278	682
26	598	1,210	1,980	1,150	1,010	1,270	1,540	3,960	1,660	380	287	640
27	591	1,130	1,700	910	1,100	1,260	1,710	3,300	1,720	365	287	552
28	591	980	1,560	870	1,220	1,220	1,860	2,950	1,740	341	269	536
29	605	880	1,320	840	------	1,180	1,820	2,830	1,650	319	252	516
30	598	830	1,180	950	------	1,140	1,750	2,950	1,430	314	248	506
31	584	------	1,110	980	------	1,180	------	3,550	------	305	244	------
TOTAL	19,358	21,059	37,168	40,092	24,188	39,850	44,960	96,590	66,060	18,554	8,514	12,208
MEAN	624	702	1,199	1,293	864	1,285	1,498	3,116	2,202	599	275	407
MAX	718	1,210	3,940	3,280	1,220	1,590	1,930	5,180	3,640	1,260	310	682
MIN	584	498	320	591	774	1,140	1,070	1,580	1,430	305	228	240
AC-FT	38,400	41,770	73,720	79,520	47,980	79,040	89,140	191,600	131,000	36,800	16,890	24,210

CAL YR 1972 TOTAL 1,128,697 MEAN 3,084 MAX 11,900 MIN 320 AC-FT 2,239,000
WTR YR 1973 TOTAL 428,581 MEAN 1,174 MAX 5,180 MIN 228 AC-FT 850,100

PEAK DISCHARGE (BASE, 6,200 CFS).--No peak above base.

13333000 GRANDE RONDE RIVER AT TROY, OREG.

LOCATION.--Lat 45°56'47", long 117°26'54", in NE¼NW¼ sec.4, T.5 N., R.43 E., Wallowa County, on left bank 500 ft (152 m) downstream from bridge at Troy, 600 ft (183 m) downstream from Wenaha River, and at mile 45.2 (72.7 km).

DRAINAGE AREA.--3,275 mi² (8,482 km²).

PERIOD OF RECORD.--August 1944 to current year. Monthly discharge only August 1944, published in WSP 1317.

GAGE.--Water-stage recorder. Datum of gage is 1,585.98 ft (483.407 m) above mean sea level. Aug. 17, 1944, to Sept. 30, 1949, nonrecording gage at site 500 ft (152 m) upstream at datum 10.85 ft (3.307 m) lower. Oct. 1, 1949, to Sept. 5, 1963, water-stage recorder at site 500 ft (152 m) upstream at datum 1.15 ft (0.351 m) higher.

AVERAGE DISCHARGE.--29 years, 3,089 ft³/s (87.5 m³/s), 2,238,000 acre-ft/yr (2.76 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,380 ft³/s (237 m³/s) Dec. 24, gage height, 6.02 ft (1.835 m); minimum, 405 ft³/s (11.5 m³/s) Aug. 22, 23.

Period of record: Maximum discharge, 42,200 ft³/s (1,200 m³/s) Dec. 23, 1964, gage height, 11.25 ft (3.429 m); minimum, 405 ft³/s (11.5 m³/s) Aug. 22, 23, 1973.

REMARKS.--Records excellent. Flow slightly regulated by Wallowa Lake (see sta 13326000) and small reservoirs. Diversions for irrigation of about 95,000 acres (38,400 hm²) above station, chiefly in vicinity of La Grande, Enterprise, and Wallowa; one transbasin diversion from Big Sheep Creek and tributaries in Imnaha River basin for irrigation of about 6,500 acres (2,630 hm²) in Wallowa Valley.

REVISIONS (WATER YEARS).--WSP 1397: 1946(M), 1948-50.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	906	856	1.160	1.620	1.370	2.370	1.780	2.350	4.210	1.560	500	450
2	893	958	1.130	1.590	1.340	2.660	1.730	2.240	3.700	1.410	500	441
3	880	958	1.100	1.390	1.300	2.420	1.660	2.290	3.290	1.310	500	441
4	880	1.010	1.010	1.280	1.310	2.240	1.680	3.200	2.940	1.220	500	441
5	880	1.160	958	1.300	1.310	2.140	1.820	3.400	2.800	1.220	490	432
6	868	1.070	880	1.240	1.280	2.020	2.000	3.500	2.920	1.180	490	432
7	868	997	800	1.130	1.250	1.920	1.960	3.700	3.190	1.100	490	450
8	856	971	740	1.090	1.210	1.920	1.920	3.800	3.530	1.030	470	560
9	856	971	680	1.130	1.160	1.920	1.920	3.900	3.730	984	470	580
10	932	945	680	1.410	1.220	2.100	1.960	3.700	3.190	958	490	560
11	1.090	932	740	1.690	1.280	2.440	2.060	3.400	2.780	893	500	550
12	984	919	800	1.590	1.280	2.180	2.290	3.300	2.560	868	500	550
13	945	906	860	2.400	1.240	2.080	2.730	3.700	2.610	832	490	540
14	932	900	960	3.700	1.220	1.920	2.970	4.200	2.700	786	480	540
15	945	906	1.100	3.190	1.240	1.820	2.820	5.000	2.540	716	460	580
16	945	893	1.200	5.530	1.270	1.770	2.730	5.700	2.200	705	441	580
17	919	919	1.400	6.460	1.280	1.800	2.850	6.200	2.200	694	441	570
18	880	919	1.600	4.750	1.300	1.770	2.660	6.400	2.100	650	450	580
19	893	932	1.900	3.850	1.250	1.750	2.540	6.200	1.980	620	441	610
20	893	893	2.420	3.110	1.220	1.780	2.400	6.000	1.860	630	450	694
21	880	868	5.390	2.660	1.210	1.860	2.260	5.200	1.860	650	441	749
22	856	832	6.340	2.240	1.210	1.920	2.200	4.200	2.060	630	423	716
23	868	784	5.430	2.020	1.220	1.880	2.220	4.000	2.350	630	423	727
24	856	796	7.260	1.940	1.220	1.880	2.180	4.390	2.200	620	441	786
25	856	880	4.660	1.860	1.310	1.960	2.140	5.950	2.040	600	480	880
26	868	1.800	3.500	1.770	1.520	2.120	2.200	4.780	1.960	590	480	932
27	856	1.820	2.960	1.520	1.540	2.060	2.440	4.000	2.000	580	480	796
28	832	1.450	2.630	1.410	1.770	1.960	2.610	3.530	2.000	560	470	749
29	868	1.310	2.240	1.390	------	1.860	2.580	3.340	1.960	530	450	727
30	844	1.220	1.960	1.410	------	1.780	2.490	3.370	1.750	510	441	716
31	856	------	1.820	1.440	------	1.840	------	3.790	------	510	441	------
TOTAL	27.685	30.775	66.268	69.110	36.330	62.140	67.800	128.730	77.210	25.774	14.523	18.357
MEAN	893	1.026	2.138	2.229	1.298	2.005	2.260	4.153	2.574	831	468	612
MAX	1.090	1.820	7.260	6.460	1.770	2.660	2.970	6.400	4.210	1.560	500	932
MIN	832	784	680	1.090	1.160	1.750	1.660	2.240	1.750	510	423	432
AC-FT	54.910	61.040	131.400	137.100	72.060	123.300	134.500	255.300	153.100	51.120	28.810	36.410

CAL YR 1972 TOTAL 1.578.216 MEAN 4.312 MAX 19.600 MIN 680 AC-FT 3.130.000
WTR YR 1973 TOTAL 624.702 MEAN 1.712 MAX 7.260 MIN 423 AC-FT 1.239.000

PEAK DISCHARGE (BASE, 9,000 CFS).--No peak above base.

13353000 SNAKE RIVER BELOW ICE HARBOR DAM, WASH.

LOCATION.--Lat 46°14'53", long 118°52'43", in NE¼SW¼ sec.24, T.9 N., R.31 E., Walla Walla County, in powerhouse forebay pier P-1 on south side of Bay 1 at Ice Harbor Dam, 8.0 mi (12.9 km) northeast of Burbank, and at mile 9.7 (15.6 km).

DRAINAGE AREA.--108,500 mi² (281,000 km²), approximately.

PERIOD OF RECORD.--October 1907 to March 1917 (gage heights only October 1907 to August 1909), March 1962 to current year. Published as "at Burbank" prior to 1911 and as "near Burbank" 1912-17.

GAGE.--Watt-hour meters on each turbine in Ice Harbor Dam powerhouse. Elevations are at mean sea level datum. Oct. 2, 1907, to Mar. 31, 1917, nonrecording gage at site approximately 2 mi (3.2 km) downstream at datum 300 ft (91 m) higher. Mar. 23, 1962, to Sept. 30, 1968, water-stage recorder 1.0 mi (1.6 km) downstream at mean sea level datum.

EXTREMES.--Current year: Maximum discharge, 99,700 ft³/s (2,820 m³/s) May 21; maximum forebay elevation, 440.1 ft (134.14 m) May 9; minimum discharge, 500 ft³/s (14.2 m³/s) Aug. 19; minimum forebay elevation, 436.8 ft (133.14 m) Dec. 7, May 16.

Period of record: Maximum discharge observed, 298,000 ft³/s (8,440 m³/s) May 29, 1913, gage height, 51.8 ft (15.79 m), site and datum then in use; no flow momentarily Aug. 27, 1965 (result of testing at Ice Harbor Dam).

Flood of May 30, 1948, reached an elevation of 361.9 ft (110.31 m) at a site 0.7 mi (1.1 km) downstream from information by Corps of Engineers.

REMARKS.--Records computed from power output, flow over spillway, flow through fish ladder, and lockage records at Ice Harbor Dam. Diversions above station for irrigation of over 4,090,000 acres (16,600 km²). Flow regulated by Lake Sacajawea and many storage reservoirs and powerplants upstream.

COOPERATION.--Records furnished by Corps of Engineers. Records not reviewed but five discharge measurements made by the Geological Survey to verify turbine and spillway ratings.

REVISIONS.--WSP 1317: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19,400	29,500	35,800	41,900	33,300	36,600	26,300	42,400	62,700	24,200	22,200	12,000
2	23,900	22,500	37,100	38,800	38,500	39,700	32,300	37,900	63,000	34,400	34,000	11,300
3	34,800	25,100	38,200	43,900	34,600	43,800	32,800	43,000	64,200	29,500	21,200	15,900
4	39,900	22,100	42,400	42,700	39,200	43,700	28,700	36,400	66,100	20,400	14,900	26,600
5	30,500	26,500	41,000	40,100	34,700	43,200	31,400	35,400	56,500	33,000	11,100	25,400
6	27,700	32,700	43,100	28,100	35,100	38,500	31,400	43,900	58,000	36,100	24,100	32,600
7	17,700	43,200	39,400	31,400	41,200	41,000	24,900	52,200	51,400	30,200	19,400	31,100
8	16,300	41,100	36,700	36,400	34,700	37,900	20,500	40,900	54,600	18,200	13,800	20,600
9	36,600	39,700	35,900	36,300	32,800	37,600	35,000	43,800	49,700	35,000	18,000	14,400
10	32,600	32,900	36,600	35,100	31,300	38,900	37,900	57,900	55,300	37,900	15,200	24,400
11	32,600	35,200	32,500	34,200	28,700	38,200	32,500	57,400	53,500	27,000	11,200	24,600
12	38,800	38,000	36,000	35,400	41,800	43,800	30,500	45,000	46,100	29,300	9,900	25,700
13	39,800	34,200	32,800	47,000	31,100	43,500	31,800	41,000	44,100	19,100	18,400	22,200
14	33,000	34,900	34,000	54,800	26,300	43,700	21,400	44,700	45,200	21,000	16,200	26,700
15	32,100	35,300	29,700	43,100	34,000	29,600	31,400	57,900	47,000	12,900	16,500	27,100
16	36,100	35,900	26,800	54,900	36,600	30,600	36,600	57,500	61,500	28,600	15,100	17,200
17	32,600	36,400	29,000	61,700	42,500	30,000	41,000	66,900	56,800	20,100	22,600	20,600
18	35,900	38,000	39,400	62,600	30,400	29,000	36,300	83,600	60,700	22,400	20,400	28,900
19	31,800	37,400	27,200	56,800	34,000	29,800	35,800	88,700	56,100	19,700	12,000	29,400
20	30,600	37,100	32,200	54,500	38,500	28,800	42,100	82,400	52,200	21,800	18,800	30,900
21	29,300	35,800	42,900	57,000	37,700	32,100	29,600	86,900	44,600	13,600	25,500	20,300
22	28,900	34,300	60,500	58,400	38,100	32,500	30,400	77,600	45,900	11,900	16,500	23,100
23	34,500	30,700	61,600	43,800	32,800	28,400	39,300	68,900	44,300	19,300	20,700	19,700
24	37,700	34,400	62,200	35,200	25,700	25,800	41,100	73,200	44,600	14,400	17,200	29,000
25	39,600	29,100	44,200	43,700	26,600	27,700	35,100	77,700	47,600	18,900	14,700	30,900
26	33,600	31,700	43,700	37,000	29,400	31,800	35,900	86,500	43,700	20,600	13,300	30,300
27	30,900	36,400	44,000	44,300	30,100	36,800	35,600	71,900	44,000	18,300	28,300	32,000
28	32,100	38,900	42,900	40,000	33,700	39,000	36,700	59,600	44,600	20,800	15,400	29,300
29	35,100	36,300	43,200	43,900	------	32,000	36,300	61,400	37,500	13,800	10,700	29,400
30	34,600	38,900	43,[illegible]00	42,800	------	33,400	43,400	68,900	35,400	33,800	18,400	24,100
31	27,700	------	43,100	35,400	------	31,800	------	58,600	------	15,300	14,600	------
TOTAL	986,700	1,024.2M	1,237.1M	1,361.2M	953,400	1,099.2M	1,004.0M	1,850.1M	1,536.9M	721,500	550,100	735,800
MEAN	31,830	34,140	39,910	43,910	34,050	35,460	33,470	59,680	51,230	23,270	17,750	24,530
MAX	39,900	43,200	62,200	62,600	42,500	43,800	43,400	88,700	66,100	37,900	34,000	32,600
MIN	16,300	22,100	26,800	28,100	25,700	25,800	20,500	35,400	35,400	11,900	9,900	11,300
AC-FT	1,957M	2,032M	2,454M	2,700M	1,891M	2,180M	1,991M	3,670M	3,048M	1,431M	1,091M	1,459M

CAL YR 1972 TOTAL 25,728,600 MEAN 70,300 MAX 226,000 MIN 11,400 AC-FT 51,030,000
WTR YR 1973 TOTAL 13,060,200 MEAN 35,780 MAX 88,700 MIN 9,900 AC-FT 25,900,000

WALLA WALLA RIVER BASIN

14010000 SOUTH FORK WALLA WALLA RIVER NEAR MILTON, OREG.

LOCATION.--Lat 45°49'48", long 118°10'08", in NE¼NE¼ sec.15, T.4 N., R.37 E., Umatilla County, on right bank 1.0 mi (1.6 km) downstream from Elbow Creek, 13 mi (21 km) southeast of Milton, and at mile 59.1 (95.1 km).

DRAINAGE AREA.--63 mi^2 (163 km^2), approximately.

PERIOD OF RECORD.--February to October 1903, August 1906 to November 1917, May 1931 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "12 mi (19 km) above Milton" 1903 and as "above Pacific Power & Light Co.'s intake near Milton" 1907-10.

GAGE.--Water-stage recorder. Altitude of gage is 2,050 ft (625 m) from river-profile map. Prior to Mar. 23, 1934, water-stage recorder or nonrecording gage at several sites within 1.5 mi (2.4 km) of present site at various datums.

AVERAGE DISCHARGE.--52 years (1907-17, 1931-73), 176 ft^3/s (4.98 m^3/s), 37.94 in/yr (964 mm/yr), 127,500 acre-ft/yr (157 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 754 ft^3/s (21.4 m^3/s) Jan. 16, gage height, 2.82 ft (0.860 m); minimum, 98 ft^3/s (2.78 m^3/s) Aug. 2.

Period of record: Maximum discharge, 2,530 ft^3/s (71.6 m^3/s) Jan. 29, 1965, gage height, 5.60 ft (1.707 m); minimum, 72 ft^3/s (2.04 m^3/s) Feb. 14, 1932.

Maximum stage about 6 ft (2 m) Mar. 31, 1931, present site and datum.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 964: Drainage area. WSP 1398: 1912, 1940, drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	134	152	179	152	208	152	191	150	115	102	102
2	128	146	158	179	150	204	150	191	148	112	102	102
3	128	146	149	167	150	194	148	200	145	112	105	100
4	128	155	146	161	152	188	150	220	142	110	105	100
5	128	155	146	164	152	179	158	212	140	110	105	100
6	128	137	146	161	150	173	165	208	138	108	105	100
7	128	134	146	155	148	168	158	208	138	108	105	112
8	128	134	143	155	145	165	160	228	138	108	102	105
9	128	134	143	155	145	168	162	212	135	105	102	102
10	140	134	140	155	150	176	162	197	132	105	105	102
11	140	134	135	155	152	176	176	194	132	105	102	102
12	134	134	135	176	155	173	194	194	132	105	102	102
13	134	134	135	243	152	173	208	208	130	102	102	102
14	134	134	135	290	152	165	208	220	132	102	102	102
15	134	134	135	306	152	162	197	228	132	102	102	102
16	131	134	143	598	150	168	194	232	135	102	100	102
17	131	134	152	472	160	173	194	228	135	100	102	102
18	131	137	167	320	162	170	188	216	138	100	102	105
19	131	134	203	264	162	173	182	204	132	102	102	108
20	131	131	254	232	158	173	179	194	128	105	102	115
21	131	131	426	212	155	173	176	185	128	105	102	112
22	131	131	394	194	155	168	179	179	125	102	102	110
23	131	131	382	188	152	162	185	170	125	100	102	112
24	131	131	410	179	155	162	179	191	125	100	105	120
25	131	149	310	176	165	165	182	194	128	100	105	138
26	134	294	262	165	170	168	191	179	125	100	105	112
27	131	191	236	162	176	162	208	168	122	102	102	108
28	134	164	215	162	182	160	200	162	120	102	102	102
29	134	158	200	160	-------	155	200	160	120	102	102	102
30	131	155	197	160	------	155	197	155	120	102	102	102
31	131	------	191	158	------	160	------	152	------	102	102	------
TOTAL	4.076	4.384	6.286	6.603	4.359	5.319	5.382	6.080	3,970	3.235	3.187	3.185
MEAN	131	146	203	213	156	172	179	196	132	104	103	106
MAX	140	294	426	598	182	208	208	232	150	115	105	138
MIN	128	131	135	155	145	155	148	152	120	100	100	100
AC-FT	8.080	8.700	12.470	13.100	8.650	10.550	10.680	12.060	7.870	6.420	6.320	6.320

CAL YR 1972 TOTAL 83.461 MEAN 228 MAX 700 MIN 128 AC-FT 165.500
WTR YR 1973 TOTAL 56.066 MEAN 154 MAX 598 MIN 100 AC-FT 111.200

PEAK DISCHARGE (BASE, 600 CFS).--Jan. 16 (1500) 754 cfs (2.82 ft).

14010800 NORTH FORK WALLA WALLA RIVER NEAR MILTON-FREEWATER, OREG.

LOCATION.--Lat 44°53'06", long 118°11'06", in SE¼NW¼ sec.28, T.5 N., R.37 E., Umatilla County, on right bank 2.8 mi (4.5 km) downstream from Little Meadow Canyon, 8.9 mi (14.3 km) southeast of Milton-Freewater, and at mile 5.6 (9.0 km).

DRAINAGE AREA.--34.4 mi² (89.1 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,940 ft (591 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 250 ft³/s (7.08 m³/s) Jan. 16, gage height, 4.82 ft (1.469 m); minimum, 4.9 ft³/s (0.14 m³/s) Sept. 5, 12, 13.

Period of record: Maximum discharge, 810 ft³/s (22.9 m³/s) Mar. 13, 1972, gage height, 5.96 ft (1.817 m), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurement at gage height 6.30 ft (1.920 m); maximum gage height, 6.30 ft (1.920 m) Jan. 19, 1971; minimum discharge, 4.9 ft³/s (0.14 m³/s) Sept. 5, 12, 13, 1973.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	11	18	32	24	77	35	39	15	7.7	5.9	5.9
2	10	14	20	33	24	77	33	37	15	7.7	6.2	5.9
3	10	14	18	29	22	64	32	36	15	7.7	6.2	5.4
4	9.6	15	15	27	24	58	34	36	14	7.4	5.9	5.4
5	9.6	20	15	26	24	50	38	34	13	7.4	5.9	4.9
6	9.6	15	16	21	22	45	43	32	13	7.4	6.2	5.2
7	9.6	13	15	17	22	41	42	30	12	7.4	6.2	6.7
8	9.6	13	13	15	20	38	44	38	12	7.4	5.9	6.4
9	9.6	12	12	15	22	38	48	32	12	7.0	5.9	5.9
10	12	12	12	16	23	42	56	30	12	7.0	6.4	5.6
11	15	12	12	17	29	42	66	28	11	7.0	6.2	5.4
12	12	12	12	21	37	40	80	26	11	7.0	5.9	5.2
13	12	12	12	58	35	38	94	25	11	6.7	5.9	5.2
14	11	12	12	106	32	36	94	25	11	6.4	5.4	5.2
15	11	12	12	105	32	35	84	25	11	6.4	5.4	5.2
16	10	12	13	183	32	40	80	25	12	6.4	5.4	5.2
17	10	12	18	183	41	50	69	25	12	6.4	5.6	5.2
18	10	13	24	124	51	51	60	24	14	6.4	5.6	5.4
19	10	13	41	88	48	54	55	23	12	6.4	5.6	5.9
20	10	12	89	69	40	58	50	22	10	6.4	5.4	7.4
21	10	12	148	56	35	57	49	20	9.6	6.7	5.4	7.4
22	10	12	149	45	34	50	50	18	9.0	6.7	5.6	7.0
23	10	12	131	40	32	43	53	18	9.6	6.4	5.6	7.7
24	10	12	142	35	32	41	52	24	9.3	6.4	5.9	9.6
25	9.6	14	110	33	36	40	53	32	9.3	6.2	5.9	16
26	10	47	83	30	45	41	54	24	9.3	6.2	5.9	10
27	10	30	70	28	49	39	58	20	9.0	6.2	5.6	7.7
28	11	22	57	28	55	36	55	18	8.3	6.2	5.6	6.7
29	12	20	45	26	------	34	49	17	8.0	6.2	5.4	6.4
30	11	18	41	27	------	35	44	17	7.7	5.9	5.6	6.2
31	11	------	37	27	------	38	------	16	------	5.9	5.9	------
TOTAL	325.2	460	1.412	1.560	922	1.428	1.654	816	337.1	208.6	179.5	197.3
MEAN	10.5	15.3	45.5	50.3	32.9	46.1	55.1	26.3	11.2	6.73	5.79	6.58
MAX	15	47	149	183	55	77	94	39	15	7.7	6.4	16
MIN	9.6	11	12	15	20	34	32	16	7.7	5.9	5.4	4.9
AC-FT	645	912	2.800	3.090	1.830	2.830	3.280	1.620	669	414	356	391

CAL YR 1972 TOTAL 23.445.8 MEAN 64.1 MAX 670 MIN 9.6 AC-FT 46.500
WTR YR 1973 TOTAL 9.499.7 MEAN 26.0 MAX 183 MIN 4.9 AC-FT 18.840

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

SPRINGS IN THE WALLA WALLA RIVER BASIN, OREG.-WASH.

Ground-water overflow through many springs on the alluvial fan of the Walla Walla River near Milton-Freewater, Oreg., amounts to about 50,000 acre-feet (61.7 hm^3) a year. During the irrigation season practically all the overflow is used to water crops on land not served by diversion from the river. A survey made in 1933 listed 57 springs or spring groups in the area, arranged in "inner", "intermediate", and "outer" zones concentric about the apex of the alluvial fan.[1]

The inner zone is 3.0 mi (4.8 km) to 3.5 mi (5.6 km) below Milton-Freewater and extends from the vicinity of Nicholas Spring, which is about 0.5 mi (0.8 km) east of the Walla Walla River at McCoy Bridge, to springs in the vicinity of Dugger Creek. Within this zone are fully three-fourths of the springs in the Walla Walla basin. The intermediate and outer zones, each of which contains only a few springs, are about 2.0 mi (3.2 km) and 4.0 mi (6.4 km), respectively, beyond the inner zone.

In order to bring about a more effective use of the available water supply through a better understanding of the relation between surface- and ground-water supplies in the basin, discharge measurements of each of the principal springs and measurements of ground-water levels in representative wells have been made and the results published periodically since 1932.

Discharge measurements, in cubic feet per second, of springs in Walla Walla River Basin, Oreg.-Wash. during water year October 1972 to September 1973

Springs of the inner zone

Date	Springs	Location	Discharge (ft^3/s)
Oct. 18	Engle Spring, Oreg.	NW¼SE¼ sec.23, T.6 N., R.35 E., total flow at diversion dam....	3.49
		Springs of the intermediate and outer zones	
Oct. 5	Lewis Spring, Oreg.	NW¼NW¼ sec.23, T.6 N., R.35 E., below road crossing............	2.29
Oct. 5	Unnamed Spring, Wash.	NW¼NE¼ sec.16, T.6 N., R.35 E., at small diversion structure...	2.72
Oct. 18	East Mud Creek (west prong), Oreg. ..	SW¼SW¼ sec.22, T.6 N., R.35 E., at two weirs....................	1.85

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[1] Piper, A.M., Robinson, T.W., and Thomas, H.E., Ground Water in the Walla Walla Basin, Oreg.-Wash: Supreme Court of the United States, October term 1935, State of Washington vs. State of Oregon, transcript of record, p. 132A, Oct. 14, 1935.

14019200 COLUMBIA RIVER AT MCNARY DAM, NEAR UMATILLA, OREG.

LOCATION.--Lat 45°56'05", long 119°17'45", in NE¼ sec.10, T.5 N., R.28 E., Umatilla County, in powerhouse forebay between generator units 2 and 3 at McNary Dam, 2.5 mi (4.0 km) northeast of Umatilla, 3.0 mi (4.8 km) upstream from Umatilla River, and at mile 292.0 (469.8 km).

DRAINAGE AREA.--214,000 mi² (554,300 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Gage-height records collected at site at Umatilla since 1876 are contained in reports of U.S. Weather Bureau. Prior to October 1966, published as "below McNary Dam."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1966, at site 1.2 mi (1.9 km) downstream (tailwater) at datum 240.04 ft (73.164 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 185,100 ft³/s (5,242 m³/s), 134,100,000 acre-ft/yr (165 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 190,000 ft³/s (5,380 m³/s) Dec. 13; maximum forebay elevation, 340.1 ft (103.66 m) July 22; minimum daily discharge, 55,100 ft³/s (1,560 m³/s) Sept. 2; minimum forebay elevation, 329.4 ft (100.40 m) Feb. 25.

Period of record: Maximum discharge, 818,000 ft³/s (23,200 m³/s) June 2, 1956, elevation, 277.01 ft (84.433 m), at site 1.2 mi (1.9 km) downstream; maximum daily discharge, 798,000 ft³/s (22,600 m³/s) June 2, 1956; minimum daily discharge, 40,800 ft³/s (1,160 m³/s) Mar. 8, 1970.

Flood of June 5, 1894, reached an elevation of 284.2 ft (86.62 m), and that of May 31, 1948, reached an elevation of about 280 ft (85.3 m), both at site 1.2 mi (1.9 km) downstream, from information by Corps of Engineers.

REMARKS.--Records computed from power output and flow over spillway at McNary Dam. Considerable regulation by many reservoirs upstream. Diurnal fluctuation caused by powerplant and gates at McNary Dam since beginning of operation in April 1953. Many diversions for irrigation above station.

COOPERATION.--Daily discharge records furnished by Corps of Engineers. Four discharge measurements made and records reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76.800	138.000	153.000	114.000	156.000	127.000	110.000	136.000	155.000	101.000	157.000	99.200
2	124.000	104.000	131.000	135.000	143.000	139.000	151.000	131.000	152.000	133.000	148.000	55.100
3	125.000	104.000	125.000	142.000	141.000	147.000	166.000	128.000	168.000	148.000	119.000	59.900
4	135.000	105.000	187.000	160.000	102.000	129.000	153.000	124.000	151.000	99.600	103.000	95.600
5	124.000	85.600	172.000	181.000	139.000	142.000	153.000	115.000	161.000	132.000	94.900	114.000
6	112.000	116.000	185.000	125.000	161.000	136.000	156.000	113.000	151.000	139.000	140.000	130.000
7	61.500	131.000	158.000	157.000	172.000	140.000	133.000	126.000	164.000	124.000	159.000	128.000
8	66.700	125.000	187.000	165.000	147.000	139.000	116.000	142.000	145.000	66.900	154.000	64.800
9	131.000	125.000	185.000	154.000	118.000	143.000	136.000	145.000	114.000	161.000	132.000	74.000
10	129.000	120.000	168.000	184.000	133.000	135.000	148.000	150.000	114.000	155.000	144.000	129.000
11	133.000	106.000	185.000	149.000	101.000	130.000	138.000	138.000	141.000	160.000	138.000	108.000
12	130.000	100.000	173.000	140.000	141.000	151.000	150.000	114.000	156.000	143.000	78.400	103.000
13	127.000	136.000	190.000	118.000	166.000	157.000	138.000	120.000	164.000	125.000	115.000	104.000
14	89.700	144.000	185.000	133.000	146.000	148.000	109.000	130.000	152.000	104.000	149.000	120.000
15	88.000	117.000	163.000	121.000	152.000	140.000	74.400	154.000	120.000	101.000	128.000	74.600
16	115.000	138.000	156.000	161.000	124.000	110.000	150.000	148.000	135.000	142.000	138.000	75.600
17	113.000	131.000	122.000	140.000	98.400	132.000	158.000	153.000	104.000	156.000	116.000	102.000
18	126.000	110.000	141.000	162.000	119.000	111.000	135.000	163.000	138.000	151.000	89.900	109.000
19	131.000	106.000	144.000	136.000	151.000	143.000	149.000	179.000	122.000	153.000	64.900	116.000
20	135.000	129.000	132.000	141.000	151.000	137.000	143.000	144.000	159.000	112.000	112.000	105.000
21	87.300	139.000	138.000	133.000	142.000	159.000	122.000	160.000	136.000	122.000	127.000	107.000
22	89.000	125.000	163.000	150.000	141.000	144.000	84.800	167.000	138.000	97.300	144.000	88.400
23	108.000	133.000	162.000	127.000	127.000	150.000	154.000	162.000	107.000	167.000	142.000	63.100
24	128.000	112.000	113.000	138.000	101.000	117.000	153.000	152.000	109.000	158.000	116.000	107.000
25	143.000	112.000	96.400	156.000	103.000	93.000	146.000	186.000	145.000	167.000	80.000	105.000
26	134.000	115.000	106.000	173.000	121.000	154.000	136.000	165.000	154.000	151.000	62.300	116.000
27	129.000	122.000	114.000	153.000	135.000	149.000	127.000	118.000	140.000	134.000	87.200	97.800
28	131.000	132.000	148.000	102.000	137.000	173.000	106.000	105.000	132.000	118.000	134.000	100.000
29	106.000	131.000	132.000	165.000	------	159.000	89.300	124.000	138.000	71.900	120.000	95.900
30	140.000	133.000	117.000	159.000	------	165.000	130.000	154.000	121.000	127.000	129.000	79.500
31	120.000	------	95.100	142.000	------	149.000	------	134.000	------	148.000	140.000	------
TOTAL	3.588.0M	3.624.6M	4.626.5M	4.516.0M	3.768.4M	4.348.0M	4.014.5M	4.380.0M	4.186.0M	4.067.7M	3.761.6M	2.926.4M
MEAN	115.700	120.800	149.200	145.700	134.600	140.300	133.800	141.300	139.500	131.200	121.300	97.550
MAX	143.000	144.000	190.000	184.000	172.000	173.000	166.000	186.000	168.000	167.000	159.000	130.000
MIN	61.500	85.600	95.100	102.000	98.400	93.000	74.400	105.000	104.000	66.900	62.300	55.100
AC-FT	7.117M	7.189M	9.177M	8.957M	7.475M	8.624M	7.963M	8.688M	8.303M	8.068M	7.461M	5.805M

CAL YR 1972 TOTAL 85.986.000 MEAN 234.900 MAX 612.000 MIN 61.500 AC-FT 170.600.000
WTR YR 1973 TOTAL 47.807.700 MEAN 131.000 MAX 190.000 MIN 55.100 AC-FT 94.830.000

14020000 UMATILLA RIVER ABOVE MEACHAM CREEK, NEAR GIBBON, OREG.

LOCATION.--Lat 45°43'11", long 118°19'20", in SE¼SW¼ sec.21, T.3 N., R.36 E., Umatilla County, Umatilla Indian Reservation, on right bank 0.8 mi (1.3 km) downstream from Ryan Creek, 2.2 mi (3.5 km) upstream from Meacham Creek, 2.5 mi (4.0 km) northeast of Gibbon, and at mile 83.1 (133.7 km).

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--April 1933 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,854.81 ft (565.346 m) above mean sea level. Prior to June 27, 1939, at site 1 mi (2 km) downstream at datum 43.94 ft (13.393 m) lower.

AVERAGE DISCHARGE.--40 years, 221 ft^3/s (6.26 m^3/s), 22.91 in/yr (582 mm/yr), 160,100 acre-ft/yr (197 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft^3/s (33.7 m^3/s) Dec. 24, gage height, 4.84 ft (1.475 m); minimum, 40 ft^3/s (1.13 m^3/s) Aug. 21.

Period of record: Maximum discharge, 4,910 ft^3/s (139 m^3/s) Jan. 29, 1965, gage height, 9.50 ft (2.896 m), from rating curve extended above 2,100 ft^3/s (59.5 m^3/s) on basis of slope-area measurement of peak flow; minimum, 16 ft^3/s (0.45 m^3/s) Nov. 9, 1965.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1935: 1946-48(M), 1950(M), 1953(M), 1956-59(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	58	70	165	117	224	155	215	91	48	43	45
2	53	65	72	162	114	240	146	206	88	48	43	44
3	53	67	70	141	114	224	146	209	85	46	43	43
4	54	75	68	125	117	209	150	237	84	45	44	43
5	54	78	66	110	117	190	162	230	81	45	43	43
6	54	68	64	95	115	180	180	227	78	45	44	43
7	55	63	62	85	114	170	180	212	77	43	44	49
8	55	61	60	85	110	165	180	234	75	43	44	49
9	55	58	60	95	110	165	185	224	71	43	44	46
10	61	57	59	100	115	185	198	212	70	42	46	45
11	64	56	59	110	128	188	224	200	70	43	45	45
12	58	55	59	126	141	185	262	195	68	42	45	44
13	57	55	59	352	139	185	324	203	65	42	44	44
14	56	54	60	608	135	172	312	206	65	42	43	42
15	56	54	62	578	135	170	276	215	65	42	43	45
16	56	54	70	722	132	178	265	215	67	42	43	45
17	54	54	108	680	150	192	276	203	68	42	43	45
18	54	56	139	475	165	203	254	185	65	42	43	46
19	54	55	206	348	162	221	248	178	62	41	43	49
20	54	54	328	279	150	230	224	158	60	44	42	53
21	54	54	788	237	141	227	218	146	56	46	42	52
22	54	53	680	203	137	203	227	137	55	44	42	52
23	54	53	740	182	135	188	251	124	55	44	43	53
24	54	53	1.000	170	130	175	237	139	56	45	44	58
25	54	60	566	162	139	175	234	146	55	44	46	60
26	54	190	376	148	155	180	244	123	56	44	45	53
27	54	115	300	135	165	178	265	115	55	45	43	49
28	56	89	268	132	182	170	251	110	51	44	43	45
29	60	78	244	128	------	160	230	103	49	44	43	44
30	56	74	198	126	------	158	218	101	48	43	44	42
31	55	------	182	124	------	162	------	97	------	43	44	------
TOTAL	1.715	2.016	7.143	7.188	3.764	5.852	6.722	5.505	1.991	1.356	1.351	1.416
MEAN	55.3	67.2	230	232	134	189	224	178	66.4	43.7	43.6	47.2
MAX	64	190	1.000	722	182	240	324	237	91	48	46	60
MIN	53	53	59	85	110	158	146	97	48	41	42	42
CFSM	.42	.51	1.76	1.77	1.02	1.44	1.71	1.36	.51	.33	.33	.36
IN.	.49	.57	2.03	2.04	1.07	1.66	1.91	1.56	.57	.39	.38	.40
AC-FT	3.400	4.000	14.170	14.260	7.470	11.610	13.330	10.920	3.950	2.690	2.680	2.810

CAL YR 1972 TOTAL 112.116 MEAN 306 MAX 2.460 MIN 49 CFSM 2.34 IN 31.84 AC-FT 222.400
WTR YR 1973 TOTAL 46.019 MEAN 126 MAX 1.000 MIN 41 CFSM .96 IN 13.07 AC-FT 91.280

PEAK DISCHARGE (BASE, 1,400 CFS).--No peak above base.

14020700 UMATILLA RIVER NEAR CAYUSE, OREG.

LOCATION.--Lat 45°40'57", long 118°31'15", in SE¼NE¼ sec.2, T.2 N., R.34 E., Umatilla County, in Umatilla Indian Reservation, on left bank 13.0 mi (20.9 km) east of Pendleton post office, 1.7 mi (2.7 km) east of Cayuse, and at mile 70.7 (113.8 km).

DRAINAGE AREA.--384 mi^2 (995 km^2).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,453.36 ft (442.984 m) above mean sea level.

AVERAGE DISCHARGE.--5 years. 527 ft^3/s (14.9 m^3/s), 381,800 acre-ft/yr (471 hm^3/yr).

EXTREMES.--Current year: Max'mum discharge, 3,160 ft^3/s (89.5 m^3/s) Dec. 24, gage height, 6.49 ft (1.978 m); minimum, 30 ft^3/s (0.85 m^3/s) July 15.

Period of record: Maximum discharge, 8,830 ft^3/s (250 m^3/s) Jan. 6, 1969, gage height, 8.21 ft (2.502 m); maximum gage height, 8.46 ft (2.579 m) Mar. 13, 1972; minimum discharge, 30 ft^3/s (0.85 m^3/s) July 15, 1973.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	66	128	362	204	525	358	372	116	56	38	43
2	53	83	139	357	189	597	334	344	111	55	37	42
3	53	83	133	306	181	561	321	340	107	53	37	41
4	54	95	125	271	193	523	321	412	102	52	37	40
5	54	107	129	251	204	476	350	403	96	51	37	39
6	54	94	134	227	206	438	402	388	90	51	38	40
7	53	84	120	191	200	413	399	363	89	51	37	47
8	52	81	110	190	189	394	383	399	86	50	37	50
9	53	79	115	185	186	394	388	385	85	49	37	46
10	64	76	110	190	201	431	395	348	82	48	38	44
11	78	75	115	199	236	488	435	317	80	47	38	43
12	68	74	120	206	303	475	502	298	79	47	37	43
13	66	73	115	571	302	472	639	296	79	47	36	42
14	64	71	120	1,270	285	429	633	302	78	46	36	44
15	63	71	130	1,360	277	407	551	308	78	43	36	47
16	62	70	160	1,560	270	410	513	308	80	40	36	47
17	61	70	202	1,670	310	462	553	286	88	41	36	47
18	60	72	226	1,250	361	458	522	262	83	41	38	48
19	60	75	335	949	363	497	519	240	77	40	38	52
20	60	73	554	734	339	537	481	217	72	41	37	59
21	59	71	1,450	609	310	549	478	195	67	45	36	59
22	59	70	1,640	493	292	528	497	177	65	44	36	60
23	59	68	1,930	427	278	480	547	166	66	42	36	62
24	59	68	2,700	380	265	435	514	181	67	41	39	71
25	59	70	1,570	350	277	421	488	207	64	41	42	83
26	60	272	1,030	310	307	434	486	173	65	40	42	71
27	60	241	795	260	338	425	516	158	62	40	40	63
28	63	178	696	249	387	401	493	144	59	39	39	61
29	73	154	581	237	------	363	442	133	57	38	38	60
30	70	138	489	230	------	340	409	126	56	38	39	59
31	66	------	430	226	------	390	------	120	------	38	41	------
TOTAL	1,872	2,902	16,631	16,070	7,453	14,153	13,869	8,368	2,386	1,395	1,169	1,553
MEAN	60.4	96.7	536	518	266	457	462	270	79.5	45.0	37.7	51.8
MAX	78	272	2,700	1,670	387	597	639	412	116	56	42	83
MIN	52	66	110	185	181	340	321	120	56	38	36	39
AC-FT	3,710	5,760	32,990	31,870	14,780	28,070	27,510	16,600	4,730	2,770	2,320	3,080

CAL YR 1972 TOTAL 260,180 MEAN 711 MAX 6,800 MIN 46 AC-FT 516,100
WTR YR 1973 TOTAL 87,821 MEAN 241 MAX 2,700 MIN 36 AC-FT 174,200

PEAK DISCHARGE (BASE, 2,200 CFS).--Dec. 24 (0630) 3,160 cfs (6.49 ft).

14021000 UMATILLA RIVER AT PENDLETON, OREG.

LOCATION.--Lat 45°40'20", long 118°47'30", in NW¼NE¼ sec.10, T.2 N., R.32 E., Umatilla County, on wingwall 0.3 mi (0.5 km) downstream from Main Street bridge at Pendleton, 1.5 mi (2.4 km) downstream from Wildhorse Creek, 2.8 mi (4.5 km) upstream from McKay Creek, and at mile 55.2 (88.8 km).

DRAINAGE AREA.--637 mi^2 (1,650 km^2).

PERIOD OF RECORD.--February 1891 to July 1892, May 1903 to June 1905 (gage heights and discharge measurements only June to December 1904), October 1934 to current year. Monthly discharge only February 1891 to July 1892, published in WSP 1318.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map. Apr. 24 to Aug. 26, 1959, nonrecording gage and Aug. 27, 1959, to Feb. 4, 1965, water-stage recorder at same site at datum of 1,067.01 ft (325.225 m). Feb. 5 to Nov. 18, 1965, wire-weight gage at Main Street bridge site. Nov. 19, 1965, to Mar. 28, 1967, water-stage recorder at site 0.7 mi (1.1 km) upstream at datum of 1,067.60 ft (325.404 m) and Nov. 19, 1965, to Sept. 30, 1969, at site 0.7 mi (1.1 km) upstream at datum of 1,064.02 ft (324.313 m). See WSP 1738 for history of changes prior to Apr. 24, 1959.

AVERAGE DISCHARGE.--39 years (1934-73), 489 ft^3/s (13.8 m^3/s), 354,300 acre-ft/yr (437 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,740 ft^3/s (77.6 m^3/s) Dec. 24, gage height, 6.36 ft (1.939 m); minimum, 18 ft^3/s (0.51 m^3/s) Aug. 21, 22.

Period of record: Maximum discharge, 15,500 ft^3/s (439 m^3/s) Jan. 30, 1965, gage height, 9.40 ft (2.865 m), datum then in use; minimum, 10 ft^3/s (0.28 m^3/s) July 13-16, 1940.

Maximum discharge, 17,000 ft^3/s (481 m^3/s) Dec. 14, 1882 (date and discharge from data furnished by Corps of Engineers). Flood of May 30, 31, 1906, reached a stage of 11.0 ft (3.35 m), 1934-58 site and datum, but before channel was improved, discharge, 15,500 ft^3/s (439 m^3/s), estimated by Corps of Engineers.

REMARKS.--Records good. No regulation. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1398: 1904, 1937.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	64	137	403	220	535	381	354	117	48	29	34
2	46	74	145	370	204	590	362	322	109	51	30	39
3	48	85	135	338	198	557	346	314	101	49	29	36
4	46	93	120	306	204	524	346	354	83	46	29	34
5	46	109	115	276	214	480	354	362	80	46	28	32
6	49	105	110	255	214	436	392	362	76	46	28	32
7	51	89	105	192	209	414	403	354	74	44	29	36
8	51	83	105	165	204	392	392	370	78	43	28	38
9	46	80	100	180	198	381	392	381	71	40	28	37
10	57	78	100	190	214	414	392	362	62	37	28	36
11	78	76	100	210	234	469	414	330	69	36	26	37
12	71	76	100	250	306	458	458	314	69	36	25	34
13	67	74	100	500	322	458	557	314	69	35	23	33
14	64	74	100	1.040	298	436	568	306	64	35	23	33
15	64	71	100	1.140	298	403	524	314	64	31	22	33
16	62	71	110	1.260	298	403	491	314	67	25	24	38
17	58	74	130	1.330	314	447	513	290	71	25	26	38
18	58	76	190	1.090	381	480	491	276	69	27	30	39
19	58	78	280	855	392	502	491	248	64	26	30	43
20	57	74	469	694	370	546	469	227	57	28	27	49
21	57	71	1.020	579	346	557	458	209	55	31	19	53
22	57	69	1.470	502	322	524	480	182	51	32	21	53
23	55	69	1.580	436	314	491	513	170	53	32	23	57
24	55	67	2.300	392	298	458	502	182	53	32	32	60
25	55	69	1.360	362	314	458	469	209	51	32	35	74
26	57	145	945	330	338	469	469	182	58	32	36	71
27	57	262	780	276	370	447	480	165	58	31	35	62
28	58	187	694	262	425	414	458	153	43	30	33	57
29	67	161	590	248	-------	381	425	141	38	29	32	57
30	71	149	524	241	-------	354	381	133	37	29	31	55
31	67	-------	469	241	-------	403	-------	129	-------	30	32	-------
TOTAL	1.782	2.853	14.583	14.913	8.019	14.281	13.371	8.323	2.011	1.094	871	1.330
MEAN	57.5	95.1	470	481	286	461	446	268	67.0	35.3	28.1	44.3
MAX	78	262	2.300	1.330	425	590	568	381	117	51	36	74
MIN	46	64	100	165	198	354	346	129	37	25	19	32
AC-FT	3.530	5.660	28.930	29.580	15.910	28.330	26.520	16.510	3.990	2.170	1.730	2.640

CAL YR 1972 TOTAL 249.364 MEAN 681 MAX 9.000 MIN 28 AC-FT 494.600
WTR YR 1973 TOTAL 83.431 MEAN 229 MAX 2.300 MIN 19 AC-FT 165.500

PEAK DISCHARGE (BASE, 3,500 CFS).--No peak above base.

14022200 NORTH FORK MCKAY CREEK NEAR PILOT ROCK, OREG.

LOCATION.--Lat 45°30'24", long 118°36'57", in NE¼SE¼ sec.1, T.1 S., R.33 E., Umatilla County, Umatilla Indian Reservation, on left bank 10 mi (16 km) northeast of Pilot Rock and at mile 0.5 (0.8 km).

DRAINAGE AREA.--48.6 mi^2 (125.9 km^2).

PERIOD OF RECORD.--May to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 1,870 ft (570 m), from topographic map.

EXTREMES.--May to September 1973: Maximum daily discharge during period, 23 ft^3/s (0.65 m^3/s) May 1; minimum, 0.37 ft^3/s (0.010 m^3/s) June 25, but may have been less during period of no gage-height record in July.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								23	3.3	1.3	.71	.83
2								22	3.1	1.3	.71	.86
3								21	3.0	1.2	.71	.81
4								20	2.8	1.2	.71	.81
5								19	2.7	1.1	.70	.85
6								18	2.5	1.1	.74	.84
7								17	2.5	1.0	.78	1.1
8								17	2.3	1.0	.75	1.2
9								16	2.3	.98	.75	1.1
10								15	2.2	.96	.80	1.1
11								15	2.1	.94	.77	1.0
12								14	2.0	.92	.74	.95
13								11	2.0	.92	.72	.93
14								9.0	1.9	.90	.70	.98
15								8.0	1.8	.88	.68	1.1
16								7.0	2.1	.86	.68	1.1
17								6.6	2.4	.84	.73	1.1
18								6.0	2.1	.80	.78	1.2
19								5.6	1.9	.76	.79	1.3
20								5.3	1.8	.74	.79	1.6
21								5.1	1.8	.72	.77	1.5
22								4.7	1.8	.76	.78	1.6
23								4.4	1.9	.88	.75	1.8
24								5.9	1.8	.92	.78	2.9
25								7.2	1.4	.84	.90	2.6
26								5.4	1.6	.79	.88	2.2
27								4.7	1.5	.78	.83	1.8
28								4.2	1.4	.74	.79	1.7
29					------			3.9	1.3	.73	.76	1.6
30					------			3.7	1.3	.73	.76	1.7
31		------			------		------	3.5	------	.71	.79	------
TOTAL								328.2	62.6	28.30	23.53	40.16
MEAN								10.6	2.09	.91	.76	1.34
MAX								23	3.3	1.3	.90	2.9
MIN								3.5	1.3	.71	.68	.81
AC-FT								651	124	56	47	80

14022500 MCKAY CREEK NEAR PILOT ROCK, OREG.

LOCATION.--Lat 45°32'57", long 118°46'24", in NW¼SE¼ sec.23, T.1 N., R.32 E., Umatilla County, on left bank 500 ft (152 m) upstream from county road bridge, 5.5 mi (8.8 km) northeast of Pilot Rock, and at mile 8.2 (13.2 km).

DRAINAGE AREA.--180 mi^2 (466 km^2).

PERIOD OF RECORD.--May to August 1921, October 1926 to June 1928, December 1928 to July 1929, October 1929 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,343.60 ft (409.529 m) above mean sea level. See WSP 1318 or 1738 for history of changes prior to Apr. 9, 1941. Apr. 9, 1941, to July 24, 1963, at site 1,000 ft (305 m) downstream at datum 7.92 ft (2.414 m) lower.

AVERAGE DISCHARGE.--45 years (1926-27, 1929-73), 96.8 ft^3/s (2.74 m^3/s), 70,130 acre-ft/yr (86.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 284 ft^3/s (8.04 m^3/s) Dec. 21, gage height, 2.66 ft (0.811 m); no flow July 26 to Sept. 24.

Period of record: Maximum discharge, 7,400 ft^3/s (210 m^3/s) Jan. 30, 1965, gage height, 8.40 ft (2.560 m); no flow at times.

REMARKS.--Records good. No regulation. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1398: 1928-29, 1933, 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	4.9	20	66	35	108	79	45	3.4	.80		0
2	3.1	5.5	20	70	32	104	77	40	3.4	.80		0
3	2.8	7.5	23	63	32	98	77	38	3.2	.70		0
4	3.1	13	21	56	34	93	77	41	4.7	.60		0
5	3.4	14	18	52	36	87	79	38	4.2	.60		0
6	3.1	15	16	40	37	81	81	34	3.7	.60		0
7	3.1	13	14	35	37	76	79	32	3.4	.60		0
8	2.8	12	14	33	36	70	74	35	3.2	.60		0
9	2.8	12	14	36	36	70	70	33	2.9	.50		0
10	3.4	12	14	43	38	72	66	30	2.4	.40		0
11	4.0	12	14	46	43	74	63	26	2.0	.40		0
12	4.0	12	14	50	51	68	63	20	1.6	.40		0
13	4.0	12	17	75	57	70	63	19	1.6	.30		0
14	4.0	12	24	117	57	63	60	15	1.5	.30		0
15	4.0	12	34	117	57	63	54	16	1.5	.30		0
16	4.0	12	54	121	57	62	52	16	2.0	.20		0
17	4.3	12	66	136	66	74	57	13	2.0	.20		0
18	4.3	12	83	123	79	74	56	11	1.5	.20		0
19	4.6	13	128	110	83	87	64	10	1.5	.20		0
20	5.2	13	128	93	81	108	70	10	1.5	.20		0
21	5.2	12	236	81	76	114	89	10	1.2	.20		0
22	5.2	12	224	70	72	110	100	9.5	1.0	.20		0
23	5.5	12	200	63	68	102	106	8.6	1.2	.10		0
24	6.1	11	228	57	66	94	98	11	1.0	.10		0
25	5.8	10	174	56	72	91	89	10	1.0	.10		.20
26	4.3	23	133	48	79	87	79	6.4	.90	0		1.4
27	4.0	30	115	41	83	81	64	4.5	.90	0		.40
28	3.7	26	110	41	91	74	60	4.2	.80	0		.30
29	4.0	23	98	39	------	68	54	4.2	.80	0		.30
30	4.6	21	83	37	------	63	49	3.7	.80	0		.30
31	4.6	------	76	37	------	79	------	3.4	------	0		------
TOTAL	126.1	410.9	2,413	2,052	1,591	2,565	2,149	597.5	60.80	9.60	0	2.90
MEAN	4.07	13.7	77.8	66.2	56.8	82.7	71.6	19.3	2.03	.31	0	.097
MAX	6.1	30	236	136	91	114	106	45	4.7	.80	0	1.4
MIN	2.8	4.9	14	33	32	62	49	3.4	.80	0	0	0
AC-FT	250	815	4,790	4,070	3,160	5,090	4,260	1,190	121	19	0	5.8

CAL YR 1972 TOTAL 51,611.30 MEAN 141 MAX 1,470 MIN .10 AC-FT 102,400
WTR YR 1973 TOTAL 11,977.80 MEAN 32.8 MAX 236 MIN 0 AC-FT 23,760

PEAK DISCHARGE (BASE, 840 CFS).--No peak above base.

14023000 MCKAY RESERVOIR NEAR PENDLETON, OREG.

LOCATION.--Lat 45°36'28", long 118°47'30", in SE¼ sec.34, T.2 N., R.32 E., Umatilla County, on Bureau of Reclamation land, near right end of McKay Dam on McKay Creek, 4.0 mi (6.4 km) south of Pendleton, and at mile 4.9 (7.9 km).

DRAINAGE AREA.--186 mi^2 (482 km^2).

PERIOD OF RECORD.--December 1927 to current year.

GAGE.--Nonrecording gage. Datum of gage is 0.16 ft (0.049 m) above mean sea level.

EXTREMES.--Current year: Maximum contents observed, 33,260 acre-ft (41.0 hm^3) May 14-19, gage height, 1,279.6 ft (390.02 m); minimum observed, 224 acre-ft (0.276 hm^3) many days in August and September, gage height, 1,193.2 ft (363.69 m).

Period of record: Maximum contents observed, 73,840 acre-ft (91.0 hm^3) June 9, 1950, gage height, 1,322.0 ft (402.95 m); no usable contents Sept. 7, 1966.

REMARKS.--Reservoir is formed by gravel-fill dam with concrete facing, completed in 1926; storage began in 1927. Usable capacity, 73,830 acre-ft (91.0 hm^3), between gage heights 1,182.0 ft (360.27 m), floor of trashrack structure, and 1,322.0 ft (402.95 m) top of spillway gates. Dead storage, about 6 acre-ft (7,400 m^3), included in records. Water is used for irrigation of land along McKay Creek and Umatilla River.

COOPERATION.--Gage heights and capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 1154: Drainage area.

MONTHEND GAGE HEIGHT AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	1,235.5	9,220	-
Oct. 31	-	a9,220	0
Nov. 30	1,236.8	9,740	+520
Dec. 31	-	a14,900	+5,160
CAL YR 1972	-	-	-29,000
Jan. 31	1,257.2	19,320	+4,420
Feb. 28	1,263.1	22,650	+3,330
Mar. 31	-	a28,100	+5,450
Apr. 30	1,278.5	32,490	+4,390
May 31	1,277.3	31,660	-830
June 30	1,256.8	19,100	-12,560
July 31	1,228.2	6,460	-12,640
Aug. 31	-	224	-6,240
Sept.30	1,193.2	224	0
WTR YR 1973	-	-	-9,000

a No gage-height record, contents interpolated.

14023500 MCKAY CREEK NEAR PENDLETON, OREG.

LOCATION.--Lat 45°36'34", long 118°47'55", in SE¼NW¼ sec.34, T.2 N., R.32 E., Umatilla County, on right bank 35 ft (11 m) upstream from diversion dam, 0.2 mi (0.3 km) downstream from McKay Dam, 4.5 mi (7.2 km) south of Pendleton, and at mile 4.7 (7.6 km).

DRAINAGE AREA.--186 mi^2 (482 km^2).

PERIOD OF RECORD.--November 1918 to May 1919, October 1919 to September 1923, October 1924 to September 1927, November 1927 to September 1943, April 1944 to October 1947 (irrigation seasons only), March 1948 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Concrete control since Mar. 23, 1928. Datum of gage is 1,163.71 ft (354.699 m) above mean sea level (Bureau of Reclamation bench mark)). See WSP 1318 or 1738 for history of changes prior to Nov. 16, 1948.

AVERAGE DISCHARGE.--36 years, (1932-43, 1948-73), 91.3 ft^3/s (2.586 m^3/s), 66,150 acre-ft/yr (81.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 294 ft^3/s (8.33 m^3/s) July 10, 11, gage height, 1.36 ft (0.415 m); no flow at times.
Period of record: Maximum discharge observed, 3,250 ft^3/s (92.0 m^3/s) Feb. 10, 1921, gage height, 4.4 ft (1.34 m), site and datum then in use, from rating curve extended above 1,200 ft^3/s (34.0 m^3/s); no flow at times each year.

REMARKS.--Records fair. Flow completely regulated since 1927 by McKay Reservoir (see station 14023000). Many diversions for irrigation above station. Since 1932, records have excluded flow in Elder ditch which, since 1953, has diverted not over 1.5 ft^3/s (0.042 m^3/s) at station for irrigation during season and up to 1 ft^3/s (0.03 m^3/s) seepage from reservoir, for stock water at other times.

REVISIONS (WATER YEARS).--WSP 1154: Drainage area. WSP 1398: 1923.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	7.0	113	246	122	.40
2							0	7.0	75	246	111	.40
3							0	7.0	93	246	104	.60
4							0	7.0	140	246	104	.80
5							0	7.0	179	249	104	.20
6							0	7.0	194	282	118	0
7							0	6.0	200	286	115	0
8							0	6.0	200	282	118	0
9							0	6.0	200	282	122	0
10							0	6.0	197	282	130	0
11							0	6.0	197	290	128	0
12							0	6.0	207	286	125	0
13							0	6.0	218	286	122	0
14							0	6.0	218	278	120	0
15							0	6.0	238	246	128	0
16							0	7.0	252	146	132	0
17							3.8	7.0	249	93	130	0
18							8.3	7.0	232	81	122	0
19							6.0	25	221	81	118	0
20							6.0	95	204	74	111	0
21							6.0	95	194	97	106	0
22							6.0	111	207	102	108	0
23							5.0	120	207	102	102	0
24							5.0	58	197	100	35	0
25							5.0	9.5	197	106	0	0
26							5.0	8.0	197	118	0	0
27							5.0	8.0	210	125	0	0
28							5.0	8.0	232	122	0	0
29					------		5.0	20	238	125	0	0
30					------		6.0	114	242	140	.20	0
31		------			------		------	132	------	138	.30	------
TOTAL	0	0	0	0	0	0	77.1	920.5	5,948	5,783	2,735.50	2.40
MEAN	0	0	0	0	0	0	2.57	29.7	198	187	88.2	.080
MAX	0	0	0	0	0	0	8.3	132	252	290	132	.80
MIN	0	0	0	0	0	0	0	6.0	75	74	0	0
AC-FT	0	0	0	0	0	0	153	1,830	11,800	11,470	5,430	4.8

CAL YR 1972 TOTAL 63,619.50 MEAN 174 MAX 936 MIN 0 AC-FT 126,200
WTR YR 1973 TOTAL 15,466.50 MEAN 42.4 MAX 290 MIN 0 AC-FT 30,680

14024200 EAST BIRCH CREEK NEAR PILOT ROCK, OREG.

LOCATION.--Lat 45°25'55", long 118°49'12", in SW¼SE¼ sec.33, T.1 S., R.32 E., Umatilla County, on right bank 40 ft (12 m) downstream from county road bridge, 2.0 mi (3.2 km) downstream from California Gulch, 3.5 mi (5.6 km) south of Pilot Rock, and at mile 21.8 (35.1 km).

DRAINAGE AREA.--69.7 mi² (180.5 km²).

PERIOD OF RECORD.--June 1964 to September 1967 (discharge measurements only). October 1967 to June 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,918.50 ft (584.759 m) above mean sea level, elevation by plane table closed stadia traverse (levels by USGS).

AVERAGE DISCHARGE.--5 years (1967-72), 31.4 ft³/s (0.89 m³/s), 22,750 acre-ft/yr (28.1 hm³/yr).

EXTREMES.--Maximum discharge during period October 1972 to June 1973, 67 ft³/s (1.90 m³/s) Jan. 17, gage height, 1.75 ft (0.533 m); minimum, 1.7 ft³/s (0.048 m³/s) June 27.

Period of record: Maximum discharge, 604 ft³/s (17.1 m³/s) Mar. 13, 1972, gage height, 3.19 ft (0.972 m); maximum gage height, 3.40 ft (1.036 m) June 5, 1969; minimum discharge, 0.08 ft³/s (0.002 m³/s) Aug. 10-12, 1968.

REMARKS.--Records good. No regulation. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	7.3	7.6	15	13	27	25	24	6.0			
2	3.4	8.1	8.6	15	12	29	24	20	5.1			
3	3.3	7.9	8.6	14	11	28	24	17	5.0			
4	3.4	7.9	5.2	11	12	29	26	22	4.2			
5	3.3	7.6	2.6	9.0	13	27	29	21	3.0			
6	3.4	7.1	4.7	7.2	13	26	33	20	2.4			
7	3.5	6.6	4.5	5.9	12	25	33	20	2.2			
8	3.5	6.4	4.1	6.0	11	24	32	23	2.2			
9	3.4	6.4	4.3	6.4	12	23	32	20	2.2			
10	3.7	6.2	4.1	7.8	12	23	34	19	2.4			
11	5.7	6.3	4.8	10	12	23	36	19	2.6			
12	5.8	6.4	4.9	13	12	22	44	18	2.6			
13	5.6	6.3	5.5	20	13	22	48	14	2.6			
14	5.5	6.2	6.3	25	13	21	41	12	3.0			
15	5.3	5.9	6.8	27	13	20	38	11	3.2			
16	5.2	5.9	9.7	41	13	20	37	10	3.3			
17	5.2	6.2	14	65	15	22	38	7.8	3.6			
18	5.1	6.2	16	59	17	21	36	6.9	3.6			
19	5.1	6.3	16	50	19	22	35	6.6	3.3			
20	5.2	6.0	17	41	20	24	32	6.4	3.0			
21	5.0	6.0	23	35	20	26	30	6.3	2.8			
22	4.8	5.8	38	29	19	27	31	6.0	2.7			
23	4.8	5.6	45	26	18	26	35	5.9	2.7			
24	5.8	6.0	40	23	18	26	34	6.4	2.6			
25	6.7	6.1	35	22	18	25	34	7.3	2.3			
26	6.6	9.6	30	19	19	26	34	6.9	2.1			
27	6.6	9.6	28	14	20	26	35	7.6	2.1			
28	6.9	8.8	25	16	22	25	32	7.7	2.1			
29	7.3	8.2	21	16	------	24	29	6.9	1.8			
30	7.3	7.8	19	15	------	23	26	6.5	1.8			
31	7.2	------	18	14	------	27	------	5.8	------			------
TOTAL	157.4	206.7	477.3	677.3	422	759	997	391.0	88.5			
MEAN	5.08	6.89	15.4	21.8	15.1	24.5	33.2	12.6	2.95			
MAX	7.3	9.6	45	65	22	29	48	24	6.0			
MIN	3.3	5.6	2.6	5.9	11	20	24	5.8	1.8			
AC-FT	312	410	947	1,340	837	1,510	1,980	776	176			

CAL YR 1972 TOTAL 16,400.95 MEAN 44.8 MAX 440 MIN .76 AC-FT 32,530

PEAK DISCHARGE (BASE, 190 CFS).--No peak above base.

14025000 BIRCH CREEK AT RIETH, OREG.

LOCATION.--Lat 45°39'10", long 118°52'45", in SE¼ sec.13, T.2 N., R.31 E., Umatilla County, on right bank 600 ft (183 m) downstream from road bridge, 0.3 mi (0.5 km) southwest of Rieth, and at mile 0.2 (0.3 km).

DRAINAGE AREA.--291 mi² (754 km²).

PERIOD OF RECORD.--May to August 1921, March to July 1922, April to September 1923, April to September 1927, January to June 1928, November 1928 to August 1929, October 1929 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 951.04 ft (289.877 m) above mean sea level. See WSP 1738 for history of changes prior to July 24, 1957.

AVERAGE DISCHARGE.--44 years (1929-73), 47.3 ft³/s (1.340 m³/s), 34,270 acre-ft/yr (42.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 102 ft³/s (2.89 m³/s) Jan. 17, gage height, 1.21 ft (0.369 m); maximum gage height, 1.87 ft (0.570 m) Dec. 17, backwater from ice; no flow at times.
Period of record: Maximum discharge, 2,200 ft³/s (62.3 m³/s) Jan. 30, 1965, gage height, 6.40 ft (1.951 m); no flow at times.

REMARKS.--Records fair. No regulation. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 984: 1939. WSP 1398: 1929, 1932-33, 1938-39, 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	6.6	9.2	45	19	56	33	25	2.5	0	.50	
2	2.0	7.1	10	44	18	53	34	20	2.0	0	.70	
3	2.0	8.0	11	40	18	51	36	15	1.2	.10	.50	
4	2.0	7.5	11	35	18	49	38	15	1.2	0	.50	
5	2.0	7.5	10	30	18	47	40	16	1.0	0	.50	
6	.80	7.5	9.0	25	18	45	42	15	.70	0	.50	
7	.10	8.0	8.0	20	19	45	44	16	.50	0	.70	
8	0	7.5	8.0	18	19	45	46	17	.50	.10	.70	
9	.10	7.5	8.0	19	19	43	50	22	.40	.10	.70	
10	.20	7.5	8.0	22	19	39	58	20	.30	.10	.70	
11	.20	8.6	8.0	24	19	40	70	20	.40	.10	.50	
12	.20	8.0	8.0	28	19	39	79	47	.50	.10	.70	
13	.30	8.0	8.0	38	19	37	86	16	.70	.10	.50	
14	1.2	8.0	8.5	45	20	37	82	10	.50	.10	.50	
15	1.2	8.0	10	47	20	34	68	5.8	.50	.10	.50	
16	1.8	8.0	17	52	20	29	6[illegible]	2.2	.70	.10	.50	
17	.80	8.6	20	97	21	33	63	2.0	1.5	.10	.50	
18	.70	8.6	23	92	21	36	64	2.8	1.2	.10	.50	
19	.70	8.0	30	85	22	37	64	3.2	1.0	.10	.50	
20	1.2	7.1	43	60	22	39	63	1.2	.80	.10	.50	
21	1.0	6.6	45	45	23	39	53	.70	1.0	.20	.50	
22	1.5	7.1	50	39	23	37	44	.40	1.0	.20	.40	
23	1.5	7.1	57	34	24	36	54	.30	1.5	.20	.40	
24	1.5	8.0	57	32	26	36	49	.30	1.5	.20	.50	
25	3.5	9.2	57	29	30	35	38	.50	1.0	.20	.40	
26	2.8	9.2	56	27	35	35	42	1.0	.80	.20	.10	
27	3.5	9.8	54	25	41	35	42	1.8	.40	.20	0	
28	5.3	9.8	53	23	48	35	[illegible]8	4.9	.40	.30	0	
29	6.2	9.8	52	21	------	34	36	2.0	.50	.30	0	
30	6.2	9.2	48	20	------	33	30	2.2	.10	.30	0	
31	6.2	------	47	19	------	32	------	3.0	------	.40	0	------
TOTAL	58.50	241.4	843.7	1.180	639	1.221	1.550	308.30	26.30	4.10	13.50	0
MEAN	1.89	8.05	27.2	38.1	22.8	39.4	51.7	9.95	.88	.13	.44	0
MAX	6.2	9.8	57	97	48	56	86	47	2.5	.40	.70	0
MIN	0	6.6	8.0	18	18	29	30	.30	.10	0	0	0
AC-FT	116	479	1.670	2.340	1.270	2.420	3.070	612	52	8.1	27	0

CAL YR 1972 TOTAL 29.796.90 MEAN 81.4 MAX /67 MIN 0 AC-FT 59.100
WTR YR 1973 TOTAL 6.085.80 MEAN 16.7 MAX 97 MIN 0 AC-FT 12.070

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

NOTE.--No gage-height record Jan. 20 to Mar. 4.

14026000 UMATILLA RIVER AT YOAKUM, OREG.

LOCATION.--Lat 45°40'40", long 119°02'00", in SW¼ sec.2, T.2 N., R.30 E., Umatilla County, at left bank on downstream side of highway bridge, 0.5 mi (0.8 km) northeast of Yoakum, 2.5 mi (4.0 km) downstream from abandoned Furnish Reservoir, 12.0 mi (19.3 km) downstream from Birch Creek, and at mile 37.7 (60.7 km).

DRAINAGE AREA.--1,280 mi² (3,320 km²), approximately.

PERIOD OF RECORD.--May 1903 to current year. Published as "above Furnish Reservoir, near Yoakum" October 1916 to September 1934.

GAGE.--Water-stage recorder. Datum of gage is 768.21 ft (234.150 m) above mean sea level. See WSP 1318 or 1738 for history of changes prior to Oct. 21, 1948.

AVERAGE DISCHARGE.--70 years, 662 ft³/s (18.7 m³/s), 479,600 acre-ft/yr (591 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,600 ft³/s (73.6 m³/s) Dec. 24, gage height, 5.27 ft (1.606 m); minimum, 17 ft³/s (0.48 m³/s) Aug. 29.

Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) May 30, 1906, gage height, about 15.0 ft (4.57 m), site and datum then in use, from floodmarks, from rating curve extended above 6,600 ft³/s (187 m³/s); minimum, 12 ft³/s (0.34 m³/s) Aug. 10-12, 1908, Aug. 4, 1910.

REMARKS.--Records good. Slight regulation by Furnish Reservoir 1910-34, capacity, 3,900 acre-ft (4.81 hm³) prior to filling with silt. Flow regulated to some extent since 1927 by McKay Reservoir (see station 14023000). Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 794: 1906(M). WSP 1398: 1904-6, 1908-9, 1922-23, 1926, 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	82	148	450	282	525	435	425	238	274	163	30
2	66	86	160	425	262	638	410	385	220	278	151	33
3	62	102	169	395	250	614	395	365	202	282	136	34
4	60	102	157	350	254	578	385	415	205	274	136	32
5	55	112	145	318	266	536	400	445	250	270	133	30
6	61	114	140	265	270	505	440	435	262	310	139	30
7	58	106	136	225	266	475	465	415	282	326	142	33
8	60	100	130	200	258	455	450	425	282	322	142	36
9	56	98	125	210	247	440	440	455	278	322	145	39
10	54	94	125	220	258	445	450	420	266	318	157	36
11	74	94	125	240	282	505	475	390	270	322	154	38
12	80	94	125	262	326	505	525	355	278	318	151	34
13	76	92	125	779	365	505	650	335	298	326	148	34
14	74	92	125	1.100	355	480	692	330	298	326	142	33
15	72	88	125	1.250	345	450	632	335	314	322	148	34
16	70	86	135	1.340	340	435	578	326	340	211	163	36
17	68	90	160	1.600	360	470	598	314	350	139	163	41
18	67	92	200	1.300	425	485	586	294	340	110	166	41
19	66	94	300	1.020	440	500	590	266	314	108	163	48
20	66	92	548	808	435	542	560	314	298	90	157	56
21	66	90	955	686	395	578	536	314	278	106	136	56
22	67	88	1.440	572	385	566	530	306	278	128	136	56
23	68	86	1.470	510	365	530	578	318	290	130	133	64
24	68	82	2.330	465	355	495	586	286	274	130	129	66
25	72	84	1.690	435	350	470	568	247	270	130	60	74
26	72	102	1.130	400	370	470	530	229	262	148	53	80
27	72	278	871	350	395	475	536	202	258	163	49	74
28	74	211	759	322	425	440	536	190	262	160	41	64
29	80	186	656	310	------	430	500	178	266	157	30	61
30	88	163	566	306	------	400	470	205	270	169	30	58
31	84	------	505	302	------	435	------	262	------	172	30	------
TOTAL	2.194	3.280	15.775	17.415	9.326	15.397	15.500	10.181	8.293	6.839	3.826	1.381
MEAN	70.8	109	509	562	333	497	517	328	276	221	123	46.0
MAX	140	278	2.330	1.600	440	638	692	455	350	326	166	80
MIN	54	82	125	200	247	400	385	178	202	90	30	30
AC-FT	4.350	6.510	31.290	34.540	18.500	30.540	30.740	20.190	16.450	13.570	7.590	2.740

CAL YR 1972 TOTAL 355.443 MEAN 971 MAX 8.800 MIN 54 AC-FT 705.000
WTR YR 1973 TOTAL 109.407 MEAN 300 MAX 2.330 MIN 30 AC-FT 217.000

PEAK DISCHARGE (BASE, 3,600 CFS).--No peak above base.

14032000 BUTTER CREEK NEAR PINE CITY, OREG.

LOCATION.--Lat 45°32'40", long 119°18'40", in SW¼ sec.22, T.1 N., R.28 E., Morrow County, on right bank 0.5 mi (0.8 km) downstream from Mattlock Canyon, 6.0 mi (9.7 km) southeast of settlement of Pine City, 15 mi (24 km) southwest of Echo, and at mile 8.4 (13.5 km).

DRAINAGE AREA.--291 mi^2 (754 km^2).

PERIOD OF RECORD.--April to June 1928, November 1928 to June 1929, October 1929 to September 1930, January 1931 to September 1932, February to June 1933, October 1933 to September 1941, January to June 1942, October 1942 to current year. Prior to October 1945, monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m) by barometer. Prior to Oct. 1, 1944, at datum 1.1 ft (0.34 m) higher and Oct. 1, 1944, to Sept. 6, 1949, at datum 1.0 ft (0.30 m) higher.

AVERAGE DISCHARGE.--41 years (1929-30, 1931-32, 1933-41, 1942-73), 24.5 ft^3/s (0.694 m^3/s), 17,750 acre-ft/yr (21.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 192 ft^3/s (5.44 m^3/s) Jan. 17, gage height, 3.11 ft (0.948 m); no flow at times.
Period of record: Maximum discharge, 3,800 ft^3/s (108 m^3/s) Feb. 21, 1949, gage height, 12.4 ft (3.78 m), present datum, from floodmark, from rating curve extended above 440 ft^3/s (12.5 m^3/s) on basis of computation of peak flow over dam; no flow at times.

REMARKS.--Records good except those below 10 ft^3/s (0.28 m^3/s), which are fair. No regulation. Several small diversions for irrigation above station. Water is diverted into headwaters of Butter Creek from Fivemile Creek, a tributary of Camas Creek in John Day River basin, for irrigation below station.

REVISIONS (WATER YEARS).--WSP 1218: 1950(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.6	5.4	11	12	36	23	18	2.2			0
2	0	2.9	6.0	10	11	40	22	17	1.9			0
3	0	2.9	6.4	7.5	12	32	21	16	1.9			0
4	0	3.2	6.4	6.0	12	28	21	18	1.9			0
5	0	2.9	6.0	5.0	13	26	21	19	1.7			0
6	0	3.2	5.4	4.5	12	25	24	17	1.4			0
7	0	3.2	4.8	4.0	12	23	26	15	1.1			0
8	0	3.5	4.6	4.0	12	23	24	14	1.1			0
9	0	2.9	4.3	4.2	11	23	20	18	.90			0
10	0	2.9	4.0	4.8	12	23	23	14	.80			0
11	0	3.2	4.0	5.5	13	26	26	13	.80			0
12	.60	3.2	4.0	6.5	12	24	28	10	.80			0
13	.90	3.2	4.0	10	12	23	25	10	.80			0
14	1.0	3.2	4.4	20	12	22	25	9.2	.70			0
15	1.0	3.2	4.8	21	12	20	30	8.4	.60			0
16	1.0	3.2	5.2	53	12	19	28	7.6	.70			0
17	1.1	3.5	6.5	114	13	21	28	7.6	.80			0
18	1.2	3.8	8.0	48	14	23	28	6.0	1.4			0
19	1.2	4.1	9.0	36	14	20	27	5.1	1.9			0
20	1.2	3.8	10	26	14	20	25	4.1	1.1			0
21	1.4	4.1	12	25	15	20	23	3.8	1.0			0
22	1.4	4.1	19	19	15	20	24	4.4	1.0			0
23	1.4	4.1	21	20	14	19	25	3.5	.90			.10
24	1.4	3.8	18	19	15	18	24	4.1	.90			0
25	1.5	4.1	20	18	15	18	24	5.1	1.0			0
26	1.5	4.4	16	16	27	19	23	7.2	.90			0
27	1.5	4.1	15	12	29	20	22	6.0	.40			0
28	2.0	6.0	14	14	30	19	21	5.1	.30			0
29	2.4	5.1	13	16	------	19	20	4.1	.10			0
30	2.4	5.1	12	14	------	18	19	3.2	0			0
31	2.6	------	12	13	------	23	------	2.9	------			------
TOTAL	28.70	109.5	285.2	587.0	407	710	720	296.4	31.00	0	0	.10
MEAN	.93	3.65	9.20	18.9	14.5	22.9	24.0	9.56	1.03	0	0	.003
MAX	2.6	6.0	21	114	30	40	30	19	2.2	0	0	.10
MIN	0	2.6	4.0	4.0	11	18	19	2.9	0	0	0	0
AC-FT	57	217	566	1,160	807	1,410	1,430	588	61	0	0	.2

CAL YR 1972 TOTAL 13,761.30 MEAN 37.6 MAX 313 MIN 0 AC-FT 27,300
WTR YR 1973 TOTAL 3,174.90 MEAN 8.70 MAX 114 MIN 0 AC-FT 6,300

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

PRINCIPAL DIVERSIONS FROM UMATILLA RIVER BETWEEN YOAKUM AND UMATILLA GAGING STATIONS, OREG.

The following canals divert water from Umatilla River between Yoakum and Umatilla:

14027000 FURNISH CANAL near Echo, diverts from right bank of Umatilla River in SW¼SW¼ sec.31, T.3 N., R.30 E., for irrigation in vicinity of Stanfield. Records available March 1921 to current year (prior to October 1929 and March 1935 to September 1937 irrigation seasons only). Monthly figures only for irrigation seasons 1921-25, published in WSP 1318.

14029000 UMATILLA PROJECT FEED CANAL near Echo, diverts from right bank of Umatilla River in SW¼ sec.22, T.3 N., R.29 E., and delivers water to Cold Springs Reservoir, capacity, 52,380 acre-ft (64.4 hm^3) of Bureau of Reclamation. Records available October 1920 to current year (incomplete 1928, 1943-44).

14030000 ALLEN CANAL at echo, diverts from right bank of Western Land Canal, 0.5 mi (0.8 km) downstream from headgate of that canal in SW¼ sec.16, T.3 N., R.29 E., for irrigation west of Echo. Records available May 1921 to current year (irrigation seasons only in most years). Monthly figures only October to December 1923, published in WSP 1318. Published as Western Land & Irrigation Co.'s canal at Echo 1921-39.

14030500 WESTERN LAND CANAL near Echo, diverts from left bank of Umatilla River in NE¼ sec.21, T.3 N., R.29 E., for irrigation west of Echo and Stanfield. Gage is 1 mi (2 km) downstream from intake. Records available May 1921 to current year (irrigation seasons only in many years). Published as Western Land & Irrigation Co.'s canal at Echo 1921-39.

14031500 MAXWELL CANAL near Hermiston, diverts from right bank of Umatilla River in SW¼ sec.28, T.4 N., R.28 E., for irrigation near Hermiston; at times it receives water from Cold Springs Reservoir. Records available March 1921 to current year (irrigation seasons only in most years). REVISIONS (WATER YEARS).--WSP 1398: 1921.

14032500 WEST DIVERSION MAIN CANAL near Umatilla, diverts from left bank of Umatilla River in SW¼ sec.28, T.5 N., R.28 E., for irrigation near Irrigon and Boardman. Records of monthly figures April 1921 to current year (incomplete October 1925 to March 1927). Published as "Main canal, west diversion Umatilla project" 1921, 1923. REVISIONS (WATER YEARS).--WSP 1398: 1923.

Water diverted by all of these canals is used for irrigation of lands on both sides of Umatilla River near and below Echo, except that diverted by West Diversion main canal which is applied to land along Columbia River in vicinity of Irrigon.

Several small canals also divert water between Yoakum and Umatilla, but no records for these were obtained.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Month	FURNISH CANAL	UMATILLA PROJECT FEED CANAL	ALLEN CANAL	WESTERN LAND CANAL	MAXWELL CANAL	WEST DIVERSION MAIN CANAL
October	101	0	392	839	1,370	3,420
November	0	4,450	1.2	180	0	0
December	0	3,930	0	0	0	0
January	0	7,690	0	0	0	0
February	0	13,230	0	0	0	0
March	818	15,280	59	5,790	471	118
April	6,690	8,480	872	12,140	3,010	5,400
May	6,340	240	872	11,110	3,050	6,800
June	4,460	0	768	9,810	2,070	5,770
July	4,970	0	719	5,830	1,730	5,920
August	4,410	0	877	764	1,030	4,220
September	0	0	908	638	910	3,370
WTR YR 1973	27,790	53,300	5,470	47,100	13,640	35,010

NOTE.--No gage-height record for months of little or no flow and short periods at other times.

14033500 UMATILLA RIVER NEAR UMATILLA, OREG.

LOCATION.--Lat 45°54'11", long 119°19'33", in SW¼NW¼ sec.21, T.5 N., R.28 E., Umatilla County, on left bank 1.6 mi (2.6 km) downstream from West Division main canal of Umatilla project, 1.2 mi (1.9 km) southeast of Umatilla, and at mile 2.1 (3.4 km).

DRAINAGE AREA.--2,290 mi^2 (5,930 km^2), approximately.

PERIOD OF RECORD.--October 1903 to current year.

GAGE.--Water-stage recorder. Datum of gage is 330.47 ft (100.727 m) above mean sea level. Oct. 21, 1903, to Jan. 25, 1931, nonrecording gage.

AVERAGE DISCHARGE.--46 years (1927-73), 431 ft^3/s (12.2 m^3/s), 312,300 acre-ft/yr (385 hm^3/yr). Years prior to 1927 not in included in computation of average discharge owing to increased regulation and diversion since 1927.

EXTREMES.--Current year: Maximum discharge, 2,820 ft^3/s (79.9 m^3/s) Dec. 24, gage height, 4.74 ft (1.445 m); minimum, 1.4 ft^3/s (0.040 m^3/s) Apr. 12, 13.
Period of record: Maximum discharge, 19,800 ft^3/s (561 m^3/s) Jan. 30, 1965, gage height, 10.75 ft (3.277 m); no flow at times.

REMARKS.--Records good. Some regulation since 1927 by McKay Reservoir (see station 14023000). Many diversions above station for irrigation of lands above and below station; Brownell Canal diverts below station. Diversions since 1908 to Cold Springs Reservoir, an off-channel reservoir, capacity, 52,380 acre-ft (64.6 hm^3).

REVISIONS (WATER YEARS).--WSP 794: Drainage area. WSP 1398: 1909, 1911, 1914, 1928, 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	200	118	377	158	310	3.7	6.8	6.2	6.8	4.4	4.9
2	33	200	123	315	135	436	5.5	8.9	6.5	6.9	4.4	5.2
3	30	205	131	295	123	473	4.8	7.2	6.3	6.4	4.4	5.1
4	23	225	128	277	115	436	4.5	8.2	6.4	5.7	4.8	5.1
5	20	185	120	290	117	398	4.4	7.5	6.5	5.3	4.9	5.0
6	28	138	110	312	124	360	4.9	8.4	6.6	5.5	4.9	5.0
7	32	131	100	327	123	330	10	8.8	6.2	6.0	5.0	5.0
8	32	128	94	350	119	296	8.0	9.5	6.6	5.6	4.9	5.0
9	28	128	90	380	114	230	5.0	8.1	6.9	5.8	4.8	5.0
10	33	128	90	450	116	246	4.4	8.4	6.5	5.7	4.8	5.0
11	54	153	90	500	125	281	2.5	6.5	6.7	6.0	4.9	4.9
12	95	195	90	600	140	309	2.2	6.1	7.0	5.6	5.1	4.9
13	135	198	92	800	189	305	2.7	5.5	7.3	5.5	5.0	4.9
14	128	147	96	1,230	205	275	18	5.8	6.7	5.4	7.3	4.9
15	165	127	100	1,450	197	211	7.3	5.7	7.2	5.3	16	4.9
16	177	124	110	1,500	195	188	6.6	5.3	7.3	5.1	12	5.6
17	173	121	150	1,880	194	159	5.5	5.0	6.9	5.0	5.4	6.1
18	165	121	500	1,620	221	217	5.2	5.1	7.0	5.0	5.4	6.2
19	161	120	707	1,210	277	206	7.4	5.7	7.7	4.9	5.3	6.2
20	169	117	553	861	280	416	28	5.7	7.5	4.7	5.4	6.3
21	169	117	835	661	263	252	16	5.9	6.6	4.6	5.3	6.2
22	169	115	1,570	531	233	234	7.0	6.0	6.5	4.5	5.3	6.1
23	165	114	1,570	434	214	183	7.1	6.0	6.6	4.5	5.2	6.2
24	169	114	2,240	362	200	139	7.7	6.8	6.6	4.5	5.2	6.2
25	169	114	2,200	317	190	99	18	6.4	6.6	4.5	5.3	6.0
26	173	114	1,360	283	200	106	7.0	6.3	6.9	4.4	5.2	5.7
27	185	127	946	234	223	68	6.5	6.2	7.7	4.6	5.2	5.8
28	185	188	747	190	247	57	6.2	6.0	6.8	4.6	5.0	5.9
29	185	147	620	178	------	50	6.1	5.9	6.8	4.6	5.0	5.8
30	185	126	512	166	------	41	6.0	6.4	6.9	4.5	4.9	5.9
31	195	------	430	158	------	18	------	6.8	------	4.4	4.8	------
TOTAL	3,662	4,367	16,622	18,538	5,037	7,329	228.2	206.9	204.0	161.9	175.5	165.0
MEAN	118	146	536	598	180	236	7.61	6.67	6.80	5.22	5.66	5.50
MAX	195	225	2,240	1,880	280	473	28	9.5	7.7	6.9	16	6.3
MIN	20	114	90	158	114	18	2.2	5.0	6.2	4.4	4.4	4.9
AC-FT	7,260	8,660	32,970	36,770	9,990	14,540	453	410	405	321	348	327

CAL YR 1972 TOTAL 273,594.0 MEAN 748 MAX 9,380 MIN 5.7 AC-FT 542,700
WTR YR 1973 TOTAL 56,696.5 MEAN 155 MAX 2,240 MIN 2.2 AC-FT 112,500

PEAK DISCHARGE (BASE, 3,100 CFS).--No peak above base.

14034500 WILLOW CREEK AT HEPPNER, OREG.

LOCATION.--Lat 45°21'02", long 119°32'56", in SE¼NW¼ sec.35, T.2 S., R.26 E., Morrow County, on right bank at Heppner, 100 ft (30 m) upstream from Court Street bridge, 800 ft (244 m) southeast of Morrow County courthouse, 0.3 mi (0.5 km) downstream from Balm Fork and at mile 52.2 (84.0 km).

DRAINAGE AREA.--87 mi^2 (225 km^2), approximately.

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,952.73 ft (595.192 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 17.9 ft^3/s (0.51 m^3/s), 12,970 acre-ft/yr (16.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28 ft^3/s (0.79 m^3/s) Jan. 16, gage height, 1.83 ft (0.558 m); maximum gage height, 2.37 ft (0.722 m) Dec. 16, ice jam; no flow on parts of many days July to September.

Period of record: Maximum discharge, 812 ft^3/s (23.0 m^3/s) May 10, 1957, gage height, 6.15 ft (1.875 m), from rating curve extended above 230 ft^3/s (6.51 m^3/s); maximum gage height, 6.46 ft (1.969 m) May 25, 1971, backwater from Shobe Canyon; no flow at times.

Maximum discharge, about 36,000 ft^3/s (1,020 m^3/s) June 14, 1903, result of slope-area measurement (see WSP 96). Discharge for flood of Feb. 22, 1949, was 1,700 ft^3/s (48.1 m^3/s), result of slope-area measurement.

REMARKS.--Records fair. Many diversions for irrigation above station. Part of flow of Ditch Creek (John Day River basin) is diverted to Willow Creek above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.29	2.2	3.8	5.2	6.1	15	6.9	7.5	2.1	.56	.07	.04
2	.30	2.7	4.1	5.2	6.3	15	6.6	6.2	2.1	.53	.13	.06
3	.27	3.1	3.9	5.0	6.0	14	7.5	7.2	2.3	.40	.18	.04
4	.25	2.8	2.4	4.8	6.4	13	8.0	8.4	2.0	.35	.03	.17
5	.22	2.6	1.5	4.5	6.8	13	7.9	9.0	1.6	.32	.02	.03
6	.21	2.5	1.6	3.5	6.4	12	9.4	9.0	1.2	.29	.06	.03
7	.17	2.3	.56	3.2	5.9	12	9.6	9.0	1.2	.20	.12	.06
8	.19	2.2	.52	3.2	5.2	11	8.9	10	1.2	.12	.09	.07
9	.44	2.1	.54	3.2	6.3	10	8.4	9.3	1.0	.17	.04	.07
10	.69	2.1	.50	4.3	6.9	9.8	8.5	8.4	.80	.14	.04	.08
11	2.5	2.1	.52	4.9	7.3	10	8.8	7.5	.72	.11	.04	.07
12	2.5	2.1	.54	8.6	7.0	9.5	8.5	6.4	.81	.10	.06	.04
13	2.1	2.2	.50	12	6.9	9.2	9.4	5.9	1.1	.11	.06	.03
14	2.2	2.2	.50	11	6.7	8.1	10	7.5	1.1	.10	.07	.04
15	2.1	2.2	.50	10	6.5	7.0	10	6.9	1.4	.05	.05	.05
16	1.8	2.2	.70	17	6.6	8.1	9.1	6.4	1.8	.06	.05	.04
17	1.8	2.8	1.5	22	7.3	9.4	9.3	5.5	2.2	.03	.14	.04
18	1.7	4.3	2.5	17	8.0	7.4	10	3.4	2.3	.01	.22	.07
19	1.7	5.1	4.5	14	8.2	5.8	11	2.2	2.1	.02	.18	.09
20	1.7	4.4	7.7	12	8.6	5.9	11	2.0	1.7	.02	.06	.08
21	1.7	4.1	9.4	12	8.2	6.5	11	1.2	1.5	.16	.05	.09
22	1.6	3.8	11	8.8	8.0	6.8	10	.80	1.2	.13	.08	.41
23	1.5	3.7	9.7	10	8.2	6.4	10	1.2	1.2	.07	.13	.45
24	1.5	4.0	9.6	9.5	7.9	6.1	11	2.6	1.1	.04	.17	.43
25	1.5	3.9	8.7	9.2	8.7	5.6	11	3.2	1.1	.03	.09	.38
26	1.6	4.4	8.0	7.3	9.9	5.4	11	3.1	1.0	.05	.07	.27
27	1.7	4.8	7.7	5.4	11	5.6	11	2.9	.99	.05	.05	.28
28	1.7	4.3	7.6	7.5	11	4.8	12	3.0	.82	.05	.05	.29
29	1.9	4.1	6.8	7.6	------	4.7	12	2.7	.70	.04	.04	.27
30	1.9	4.0	6.3	7.3	------	5.8	11	2.1	.66	.05	.04	.28
31	1.8	------	6.3	6.8	------	7.5	------	1.3	------	.10	.04	------
TOTAL	41.53	95.3	129.98	262.0	208.3	270.4	288.8	162.80	41.00	4.46	2.52	4.35
MEAN	1.34	3.18	4.19	8.45	7.44	8.72	9.63	5.25	1.37	.14	.081	.15
MAX	2.5	5.1	11	22	11	15	12	10	2.3	.56	.22	.45
MIN	.17	2.1	.50	3.2	5.2	4.7	6.6	.80	.66	.01	.02	.03
AC-FT	82	189	258	520	413	536	573	323	81	8.8	5.0	8.6

CAL YR 1972 TOTAL 8,110.20 MEAN 22.2 MAX 172 MIN .12 AC-FT 16,090
WTR YR 1973 TOTAL 1,511.44 MEAN 4.14 MAX 22 MIN .01 AC-FT 3,000

PEAK DISCHARGE (BASE, 170 CFS).--No peak above base.

14034800 RHEA CREEK NEAR HEPPNER, OREG.

LOCATION.--Lat 45°15'33", long 119°37'22", in SW¼SE¼ sec.31, T.3 S., R.26 E., Morrow County, on right bank 1.5 mi (2.4 km) downstream from Sanford Canyon, 8 mi (13 km) southwest of Heppner, and at mile 25.0 (40.2 km).

DRAINAGE AREA.--120 mi² (311 km²), approximately.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,250 ft (686 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 17.2 ft³/s (0.49 m³/s), 12,460 acre-ft/yr (15.4 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 56 ft³/s (1.59 m³/s) Jan. 17; no flow on many days in July to September.

Period of record: Maximum discharge, 1,280 ft³/s (36.2 m³/s) June 10, 1969, gage height, 7.05 ft (2.149 m), from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement at gage height 6.72 ft (2.048 m); maximum gage height, 7.41 ft (2.259 m) Dec. 22, 1964; no flow at times.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. No regulation. Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.9	6.4	7.1	7.5	27	10	5.6	.83	.26		0
2	1.6	4.8	6.2	7.6	7.7	26	9.3	5.1	.93	.19		0
3	1.5	4.4	6.0	6.7	7.3	24	9.4	5.0	1.3	.18		0
4	1.5	4.4	3.8	6.2	8.1	23	9.1	5.1	1.6	.13		0
5	1.5	4.1	1.9	5.4	8.9	21	9.4	4.9	.36	.15		0
6	1.4	3.7	2.1	4.6	8.2	19	9.7	4.6	.50	.20		0
7	1.4	3.5	1.8	4.4	7.0	18	8.9	4.3	.25	.16		0
8	1.4	3.7	1.4	4.4	6.7	17	8.8	4.5	.16	.10		0
9	1.4	3.5	1.5	4.4	7.6	17	8.8	4.2	.55	.06		0
10	1.4	3.5	1.5	5.8	7.5	17	8.6	3.7	.18	.05		0
11	3.9	3.5	1.6	7.0	8.0	16	8.3	3.8	.54	.05		0
12	3.5	3.5	1.7	12	7.7	15	8.3	3.5	.54	.03		0
13	3.5	3.5	1.7	17	7.9	14	8.3	3.4	.29	.02		0
14	3.5	3.7	1.6	16	8.0	14	7.6	2.4	.27	.01		0
15	3.2	3.7	1.7	15	8.1	13	7.0	2.1	.88	0		0
16	2.9	3.7	2.4	23	8.3	12	7.2	2.1	.74	0		0
17	2.9	4.5	5.0	56	10	14	7.1	1.9	1.9	0		0
18	2.7	7.0	9.6	42	12	12	6.7	1.7	1.6	0		0
19	2.7	8.0	14	31	13	13	7.6	1.4	1.0	0		0
20	2.7	7.4	17	23	13	13	7.5	1.5	.63	0		0
21	2.7	6.6	16	20	13	13	7.2	1.6	.32	0		0
22	2.7	6.2	17	15	12	12	6.7	1.6	.55	0		.02
23	2.7	6.0	15	15	12	12	6.9	1.4	.62	0		.06
24	2.7	6.4	13	13	12	12	6.7	3.2	.82	0		1.2
25	2.7	6.4	13	12	15	12	6.5	5.0	.47	0		1.9
26	2.7	7.0	11	9.4	15	12	6.3	3.3	.53	0		1.1
27	2.9	7.6	9.9	8.4	16	11	6.3	2.6	.82	0		.57
28	2.9	7.2	9.7	9.8	17	11	6.2	2.0	.27	0		.30
29	3.4	6.6	8.2	9.7	------	10	6.7	1.3	.17	0		.10
30	3.2	6.4	9.2	8.9	------	10	6.3	1.2	.22	0		.40
31	3.0	------	8.1	8.4	------	12	------	1.2	------	0		------
TOTAL	78.0	154.4	219.0	428.2	284.5	472	233.4	95.2	19.84	1.59	0	5.65
MEAN	2.52	5.15	7.06	13.8	10.2	15.2	7.78	3.07	.66	.051	0	.19
MAX	3.9	8.0	17	56	17	27	10	5.6	1.9	.26	0	1.9
MIN	1.4	3.5	1.4	4.4	6.7	10	6.2	1.2	.16	0	0	0
AC-FT	155	306	434	849	564	936	463	189	39	3.2	0	11

CAL YR 1972 TOTAL 8,064.84 MEAN 22.0 MAX 263 MIN 0 AC-FT 16,000
WTR YR 1973 TOTAL 1,991.78 MEAN 5.46 MAX 56 MIN 0 AC-FT 3,950

PEAK DISCHARGE (BASE, 230 CFS).--No peak above base.

NOTE.--No gage-height record Nov. 15 to Dec. 14, Jan. 9-18.

14036000 WILLOW CREEK NEAR ARLINGTON, OREG.

LOCATION.--Lat 45°45'12", long 120°00'35", in NE¼SW¼ sec.12, T.3 N., R.22 E., Gilliam County, on right bank at bridge on discontinued highway, 3.8 mi (6.1 km) downstream from Eightmile Canyon, 10 mi (16 km) east of Arlington, and at mile 3.7 (6.0 km).

DRAINAGE AREA.--850 mi^2 (2,200 km^2), approximately.

PERIOD OF RECORD.--March to July 1906, August 1960 to current year. Records for March to August 1905 at site just upstream from Eightmile Canyon not equivalent owing to diversions and inflow.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 291.26 ft (88.776 m) above mean sea level. Mar. 1 to July 21, 1906, nonrecording gage at site 2.6 mi (4.2 km) upstream at different datum. Aug. 24, 1960, to July 1, 1964, water-stage recorder at site 430 ft (131 m) downstream at same datum.

AVERAGE DISCHARGE.--13 years, 27.0 ft^3/s (0.765 m^3/s), 19,560 acre-ft/yr (24.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 141 ft^3/s (3.99 m^3/s) Jan. 17, gage height, 4.06 ft (1.237 m); no flow July 26 to Aug. 1.
Period of record: Maximum discharge, 14,700 ft^3/s (416 m^3/s) Dec. 22, 1964, gage height, 11.05 ft (3.368 m), from floodmark, from rating curve extended above 1,900 ft^3/s (53.8 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records fair. No regulation. Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	2.6	2.2	12	21	2.6	.22	.29	.19	.16	0	.47
2	.21	2.6	2.0	12	21	2.6	.22	.26	.20	1.6	.01	.70
3	.21	2.7	1.7	9.0	21	2.9	.24	.30	.17	.15	.02	2.8
4	.21	2.6	1.4	7.5	20	2.6	.27	.36	1.3	.11	.01	.63
5	.22	2.3	1.3	6.2	19	2.2	.27	.30	.21	.08	.03	.60
6	.26	2.5	1.4	3.2	20	.88	.24	.27	.18	.07	.03	.47
7	.34	2.6	1.3	3.0	18	.27	.27	.29	.16	.09	.05	.66
8	.37	2.3	1.2	3.0	16	.27	.27	.68	.17	.08	.03	.57
9	.32	2.3	1.1	3.1	16	.17	.27	.30	.18	.09	.03	.56
10	.35	2.5	1.1	3.1	18	.17	.27	.25	.20	.09	.03	.50
11	1.2	2.3	1.1	3.2	19	1.2	.29	.25	.17	.13	.03	.43
12	.17	2.6	1.2	4.4	19	1.4	.28	.25	.16	.17	.09	.39
13	.14	2.5	1.2	38	18	.22	.27	.21	.18	.18	.52	.39
14	2.0	2.3	1.3	60	16	.22	.27	.22	.17	.31	.03	.39
15	3.9	2.2	1.4	68	4.1	.22	.24	.19	.18	.20	.03	.51
16	1.8	2.2	1.4	53	3.6	.22	.27	.20	.24	.18	.03	.81
17	1.9	2.2	1.7	94	3.6	.17	.21	.17	.20	.22	.05	.61
18	1.9	2.3	38	80	3.6	.27	.22	.19	.41	.29	.06	.42
19	1.8	2.2	68	61	5.8	.27	.27	.19	.66	.17	.58	.48
20	1.8	2.2	39	49	9.0	.27	.25	1.1	.30	.13	.15	.53
21	1.6	2.0	29	41	4.8	.27	.25	.18	.20	.11	.10	.49
22	1.6	2.0	23	37	6.4	.27	.22	2.2	.13	.12	.15	.46
23	1.6	2.0	24	32	6.4	.22	.23	.54	.12	.14	.16	.44
24	1.5	2.0	19	32	5.8	.22	.24	.73	3.6	.22	.21	.73
25	1.8	2.0	18	28	3.2	.22	.27	.60	4.7	.06	.25	.67
26	1.6	2.0	18	26	2.2	.22	.26	.20	.29	0	.82	.65
27	1.8	2.0	17	22	2.6	.22	.19	.23	.14	0	.48	2.4
28	2.1	2.0	16	18	2.9	.22	.24	.22	.31	0	.28	.79
29	1.9	2.0	15	20	------	.22	.27	.43	.11	0	.83	.69
30	2.0	2.2	14	25	------	.22	.27	3.8	.10	0	.70	1.1
31	2.4	------	13	23	------	.22	------	1.9	------	0	.54	------
TOTAL	39.21	68.2	375.0	876.7	326.0	21.64	7.55	17.30	15.33	5.15	6.33	21.34
MEAN	1.26	2.27	12.1	28.3	11.6	.70	.25	.56	.51	.17	.20	.71
MAX	3.9	2.7	68	94	21	2.9	.29	3.8	4.7	1.6	.83	2.8
MIN	.14	2.0	1.1	3.0	2.2	.17	.19	.17	.10	0	0	.39
AC-FT	78	135	744	1,740	647	43	15	34	30	10	13	42

CAL YR 1972 TOTAL 13,090.96 MEAN 35.8 MAX 458 MIN .01 AC-FT 25,970
WTR YR 1973 TOTAL 1,779.75 MEAN 4.88 MAX 94 MIN 0 AC-FT 3,530

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

14037500 STRAWBERRY CREEK ABOVE SLIDE CREEK, NEAR PRAIRIE CITY, OREG.

LOCATION.--Lat 44°20'30", long 118°39'20", in SE¼NW¼ sec.20, T.14 S., R.34 E., Grant County, on left bank 100 ft (30 m) upstream from Slide Creek, 8.5 mi (13.7 km) south of Prairie City, and at mile 9.0 (14.5 km).

DRAINAGE AREA.--7.00 mi² (18.13 km²).

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1944, published as "above South Fork, near Prairie City."

GAGE.--Water-stage recorder and log control. Datum of gage is 4,909.57 ft (1,496.437 m) above mean sea level.

AVERAGE DISCHARGE.--43 years, 12.7 ft³/s (0.360 m³/s), 24.64 in/yr (626 mm/yr), 9,200 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 70 ft³/s (1.98 m³/s) May 25, gage height, 2.03 ft (0.619 m); minimum, 1.9 ft³/s (0.054 m³/s) all or part of many days February to April.

Period of record: Maximum discharge, 172 ft³/s (4.87 m³/s) June 8, 1948, gage height, 2.23 ft (0.680 m); maximum gage height, 3.23 ft (0.985 m) May 24, 1956 (backwater from logs); minimum discharge, 1.0 ft³/s (0.028 m³/s) Mar. 20, 1955.

REMARKS.--Records good. Flow affected by natural storage in Strawberry Lake. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1488: 1932-33. WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.8	3.1	2.2	2.7	1.9	1.9	6.4	51	18	6.0	2.7
2	2.8	2.8	2.8	2.1	2.7	1.9	1.9	6.7	49	17	6.0	2.5
3	2.8	3.1	2.8	2.0	2.7	1.9	1.9	7.8	45	17	5.4	2.5
4	2.8	3.3	2.6	2.0	2.7	1.9	1.9	8.6	42	16	5.4	2.5
5	2.8	2.8	2.5	2.0	2.7	1.9	2.1	8.6	39	16	5.1	2.5
6	2.8	2.8	2.4	2.1	2.7	1.9	2.1	9.0	39	16	5.1	2.5
7	2.8	2.8	2.3	2.2	2.7	1.9	2.3	9.0	40	14	4.8	2.7
8	2.7	2.7	2.2	2.3	2.7	1.9	2.3	9.8	42	14	4.8	2.5
9	2.8	2.7	2.1	2.5	2.7	1.9	2.5	10	44	14	4.8	2.5
10	2.9	2.7	2.1	2.8	2.7	1.9	2.5	10	43	13	4.5	2.5
11	3.3	2.7	2.1	2.7	2.7	1.9	2.9	10	40	13	4.5	2.3
12	3.1	2.7	2.1	2.8	2.5	1.9	3.5	11	38	12	4.3	2.2
13	3.1	2.7	2.2	3.3	2.5	1.9	3.8	13	36	12	4.3	2.2
14	3.1	2.7	2.3	3.3	2.5	1.9	4.0	18	34	12	4.0	2.2
15	3.1	2.7	2.2	3.3	2.5	1.9	4.0	23	32	11	4.0	2.2
16	3.1	2.7	2.3	4.5	2.5	1.9	4.0	26	30	11	3.8	2.3
17	3.1	2.7	2.7	4.0	2.5	1.9	4.0	32	28	11	3.5	2.3
18	2.8	2.7	2.3	3.5	2.5	2.1	3.8	37	26	10	3.5	2.3
19	2.8	2.7	2.3	3.5	2.3	1.9	3.8	40	24	10	3.3	2.5
20	2.8	2.3	2.7	3.3	2.1	1.9	3.5	49	23	9.8	3.3	2.3
21	2.8	2.3	2.7	3.1	2.0	1.9	3.5	52	23	9.8	3.3	2.1
22	2.8	2.3	2.7	3.0	1.9	1.9	3.3	53	22	9.4	3.1	2.1
23	2.8	2.3	2.5	2.9	1.9	1.9	3.3	50	22	9.0	3.1	2.3
24	2.8	2.3	2.5	2.8	1.9	1.9	3.3	53	21	8.6	3.1	2.3
25	2.8	2.3	2.5	2.8	1.9	1.9	3.5	64	21	7.8	3.5	2.5
26	2.8	3.1	2.3	2.7	1.9	1.9	4.3	61	20	7.8	3.1	2.2
27	2.8	2.8	2.3	2.7	1.9	2.1	5.4	53	20	7.4	2.9	2.3
28	2.8	3.1	2.3	2.8	1.9	2.1	6.0	45	19	7.0	2.9	2.3
29	2.8	3.1	2.3	2.8	------	2.1	6.0	42	18	6.7	2.9	2.5
30	2.7	3.1	2.3	2.7	------	2.1	6.4	41	18	6.7	2.7	2.3
31	2.8	------	2.3	2.7	------	2.1	------	47	------	6.4	2.7	------
TOTAL	89.0	81.8	74.8	87.4	66.9	60.1	103.7	905.9	949	353.4	123.7	71.1
MEAN	2.87	2.73	2.41	2.82	2.39	1.94	3.46	29.2	31.6	11.4	3.99	2.37
MAX	3.3	3.3	3.1	4.5	2.7	2.1	6.4	64	51	18	6.0	2.7
MIN	2.7	2.3	2.1	2.0	1.9	1.9	1.9	6.4	18	6.4	2.7	2.1
CFSM	.41	.39	.34	.40	.34	.28	.49	4.17	4.51	1.63	.57	.34
IN.	.47	.43	.40	.46	.36	.32	.55	4.81	5.04	1.88	.66	.38
AC-FT	177	162	148	173	133	119	206	1,800	1,880	701	245	141

CAL YR 1972 TOTAL 4,552.7 MEAN 12.4 MAX 140 MIN 2.1 CFSM 1.77 IN 24.19 AC-FT 9,030
WTR YR 1973 TOTAL 2,966.8 MEAN 8.13 MAX 64 MIN 1.9 CFSM 1.16 IN 15.77 AC-FT 5,880

14038530 JOHN DAY RIVER NEAR JOHN DAY, OREG.

LOCATION.--Lat 44°25'10", long 118°54'10", in SE¼SE¼ sec.19, T.13 S., R.32 E., Grant County, on left bank 800 ft (244 m) downstream from Dog Creek, 2.5 mi (4.0 km) east of John Day, and at mile 251.0 (403.9 km).

DRAINAGE AREA.--386 mi^2 (1,000 km^2).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,130.56 ft (954.195 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 193 ft^3/s (5.47 m^3/s), 139,800 acre-ft/yr (172 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 720 ft^3/s (20.4 m^3/s) May 25, gage height, 5.20 ft (1.585 m); minimum, 5.9 ft^3/s (0.17 m^3/s) Aug. 23, 24, 31, Sept. 1.

Period of record: Maximum discharge, 5,830 ft^3/s (165 m^3/s) June 9, 1969, gage height, 10.80 ft (3.292 m), from floodmark; minimum, 3.5 ft^3/s (0.099 m^3/s) Aug. 26-28, 1969.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Some regulation from irrigation ditches upstream. Many diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	90	104	98	106	138	126	107	285	30	23	6.6
2	88	93	104	98	106	130	121	88	243	29	19	7.3
3	87	91	104	80	106	126	117	101	205	27	21	8.3
4	84	105	81	67	112	128	116	155	172	25	21	9.2
5	83	102	56	75	121	126	123	190	139	22	18	9.5
6	84	92	60	88	121	123	129	154	118	18	17	8.9
7	85	90	50	85	114	121	126	133	111	18	14	9.4
8	82	94	45	82	112	121	123	139	104	17	13	9.3
9	81	92	42	80	112	121	125	126	108	14	9.8	12
10	86	93	43	82	116	130	128	121	111	14	10	15
11	91	96	52	100	116	130	138	118	108	14	11	16
12	89	97	64	158	112	121	161	110	100	15	10	18
13	86	95	70	180	112	126	192	116	92	18	9.8	18
14	85	93	6[illegible]	212	110	121	186	152	99	22	9.6	20
15	85	94	80	173	112	116	164	201	98	22	9.5	21
16	83	93	110	377	112	118	154	247	95	17	8.1	23
17	85	101	140	310	118	123	161	283	156	19	7.5	36
18	82	100	150	229	121	118	149	320	131	23	7.2	38
19	82	98	160	174	116	118	147	277	100	26	7.1	43
20	82	96	160	146	116	118	139	263	80	31	7.0	53
21	81	94	200	140	116	123	130	242	58	47	6.8	48
22	81	90	180	123	114	121	128	213	50	42	6.3	52
23	81	90	190	128	114	116	129	192	50	39	6.1	63
24	80	96	170	123	116	116	128	371	60	35	5.9	87
25	81	98	140	123	116	121	130	542	59	33	6.4	113
26	80	130	130	112	118	126	132	367	55	33	6.6	103
27	80	120	125	94	121	126	143	290	50	34	6.6	87
28	82	111	120	100	128	126	150	251	45	32	6.3	72
29	84	108	110	105	------	121	134	207	38	30	6.3	71
30	81	104	105	116	------	118	129	176	32	30	6.3	69
31	82	------	95	112	------	130	------	318	------	27	6.1	------
TOTAL	2,593	2,946	3,304	4,170	3,216	3,817	4,158	6,570	3,152	803	322.3	1,146.5
MEAN	83.6	98.2	107	135	115	123	139	212	105	25.9	10.4	38.2
MAX	91	130	200	377	128	138	192	542	285	47	23	113
MIN	80	90	42	67	106	116	116	88	32	14	5.9	6.6
AC-FT	5,140	5,840	6,550	8,270	6,380	7,570	8,250	13,030	6,250	1,590	639	2,270

CAL YR 1972 TOTAL 75,154.0 MEAN 205 MAX 1,020 MIN 9.2 AC-FT 149,100
WTR YR 1973 TOTAL 36,197.8 MEAN 99.2 MAX 542 MIN 5.9 AC-FT 71,800

NOTE.--No gage-height record Dec. 5 to Jan. 9.

14040500 JOHN DAY RIVER AT PICTURE GORGE, NEAR DAYVILLE, OREG.

LOCATION.--Lat 44°31'15", long 119°37'30", in SW¼ sec.17, T.12 S., R.26 E., Grant County, on right bank 0.7 mi (1.1 km) upstream from Rock Creek, 5.5 mi (8.8 km) northwest of Dayville, and at mile 205.1 (330.0 km).

DRAINAGE AREA.--1,680 mi^2 (4,350 km^2), approximately.

PERIOD OF RECORD.--April 1926 to current year. Monthly discharge only April 1926, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 2,229.84 ft (679.655 m) above mean sea level. Prior to Oct. 11, 1926, nonrecording gage and Oct. 11, 1926, to Sept. 30, 1930, water-stage recorder at same site at datum 2.50 ft (0.762 m) higher. Oct. 1, 1930, to Aug. 28, 1970, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--47 years, 460 ft^3/s (13.0 m^3/s), 333,300 acre-ft/yr (411 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Jan. 17, gage height, 7.01 ft (2.137 m); maximum gage height, 7.52 ft (2.292 m) Dec. 19, ice jam; minimum discharge, 4.2 ft^3/s (0.119 m^3/s) Aug. 22.

Period of record: Maximum discharge, 8,170 ft^3/s (231 m^3/s) Dec. 22, 1964, gage height, 14.97 ft (4.563 m); minimum, 1.0 ft^3/s (0.028 m^3/s) for several days in August and September 1930, Aug. 8, 9, 1936, Sept. 9, 1966.

REMARKS.--Records excellent except those for period of no gage-height record, which are fair. No regulation. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1218: 1950. WSP 1348: Drainage area. WSP 1448: 1926, 1928, 1932(M), 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	178	214	269	290	404	356	409	411	42	5.6	5.8
2	126	187	210	278	270	403	343	375	369	41	5.2	5.6
3	115	190	216	273	280	375	329	374	346	30	5.1	5.9
4	101	203	203	209	270	364	322	449	311	27	5.1	6.0
5	101	218	148	188	280	360	329	598	273	26	5.2	6.0
6	101	207	152	231	310	352	353	594	241	24	5.2	6.1
7	111	200	140	253	310	345	363	560	212	24	5.1	6.4
8	122	202	130	230	290	344	361	534	189	23	5.2	6.6
9	125	204	120	230	280	345	359	519	167	21	5.4	6.9
10	131	201	120	210	280	357	360	482	160	19	5.5	7.2
11	158	205	130	230	290	400	372	460	156	15	5.2	7.4
12	164	207	150	286	290	362	432	433	151	13	5.1	7.8
13	171	205	170	442	280	352	546	409	139	13	6.6	9.0
14	163	200	200	729	280	342	590	401	133	13	8.4	8.4
15	166	195	180	533	280	330	543	426	132	12	8.0	8.8
16	175	194	220	928	280	326	516	505	133	11	7.8	9.0
17	170	199	300	1.140	280	346	507	516	145	11	7.1	9.3
18	168	207	380	800	290	339	498	540	188	10	6.9	9.7
19	163	207	410	600	300	336	500	534	178	9.8	6.8	9.9
20	165	206	440	500	290	336	490	490	155	9.6	7.0	9.5
21	166	201	440	400	290	346	455	468	137	8.6	6.8	9.7
22	166	191	567	380	283	346	443	433	130	4.8	6.0	11
23	164	182	508	330	285	336	446	399	114	5.1	4.5	12
24	159	185	587	350	287	333	425	414	100	5.4	4.9	18
25	161	194	477	330	297	343	418	738	98	5.2	5.2	22
26	165	203	404	330	312	358	430	647	94	5.2	5.6	23
27	169	242	370	300	325	362	457	543	85	5.1	5.7	43
28	170	239	361	240	347	360	485	480	67	5.2	5.7	42
29	178	227	332	300	------	353	486	412	54	5.9	5.7	41
30	179	221	306	320	------	337	456	365	51	5.8	5.8	40
31	175	------	300	300	------	357	------	340	------	5.6	5.8	------
TOTAL	4.680	6.100	8.885	12.139	8.146	10.949	12.970	14.847	5.119	456.3	183.2	412.0
MEAN	151	203	287	392	291	353	432	479	171	14.7	5.91	13.7
MAX	179	242	587	1.140	347	404	590	738	411	42	8.4	43
MIN	101	178	120	188	270	326	322	340	51	4.8	4.5	5.6
AC-FT	9.280	12.100	17.620	24.080	16.160	21.720	25.730	29.450	10.150	905	363	817

CAL YR 1972 TOTAL 220.975.3 MEAN 604 MAX 4.490 MIN 9.3 AC-FT 438.300
WTR YR 1973 TOTAL 84.886.5 MEAN 233 MAX 1.140 MIN 4.5 AC-FT 168.400

PEAK DISCHARGE (BASE, 1,300 CFS).--Jan. 17 (0130) 1,300 cfs (7.01 ft).

NOTE.--No gage-height record Jan. 17 to Feb. 21.

14042500 CAMAS CREEK NEAR UKIAH, OREG.

LOCATION.--Lat 45°09'25", long 118°49'10", in SE¼SE¼ sec.3, T.5 S., R.32 E., Umatilla County, on right bank 1.2 mi (1.9 km) upstream from Cable Creek, 5.8 mi (9.3 km) east of Ukiah, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--121 mi^2 (313 km^2).

PERIOD OF RECORD.--May 1914 to September 1917, November 1919 to July 1920, November 1920 to June 1924, March 1932 to June 1940 (fragmentary), November 1940 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "above Cable Creek, near Ukiah" 1914-17, 1919-24.

GAGE.--Water-stage recorder. Datum of gage is 3,588.61 ft (1,093.808 m) above mean sea level (levels by State Highway Department). May 1, 1914, to June 30, 1924, nonrecording gage and Mar. 1, 1932, to July 2, 1940, water-stage recorder at site 1.2 mi (1.9 km) downstream at different datum.

AVERAGE DISCHARGE.--37 years (1914-17, 1921-23, 1941-73), 95.0 ft^3/s (2.69 m^3/s), 68,830 acre-ft/yr (84.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 574 ft^3/s (16.3 m^3/s) Jan. 16, gage height, 2.54 ft (0.774 m); minimum, 1.3 ft^3/s (0.037 m^3/s) Aug. 2, 3.

Period of record: Maximum discharge, 3,840 ft^3/s (109 m^3/s) Jan. 30, 1965, gage height, 5.21 ft (1.588 m); maximum gage height, 5.24 ft (1.597 m) Feb. 3, 1963 (ice jam); minimum discharge recorded, 1 ft^3/s (0.028 m^3/s) Aug. 9, 1932, June 24 to July 2, 1940.

REMARKS.--Records excellent except those for winter periods, which are poor. No regulation. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1448: 1916, 1920, 1922(M), 1924.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	7.6	15	42	25	95	82	84	23	5.0	1.8	2.5
2	5.2	12	15	42	23	86	77	80	22	5.0	1.6	2.5
3	5.2	12	15	39	23	80	80	90	20	4.7	1.6	2.5
4	5.2	13	12	31	25	79	90	116	19	4.4	2.5	2.5
5	4.9	14	9.0	27	23	76	108	110	17	4.1	2.7	2.5
6	4.9	11	7.2	31	23	72	112	103	15	4.1	2.9	2.1
7	4.9	9.8	7.2	29	22	69	101	97	15	4.1	2.7	4.4
8	4.9	10	6.0	27	21	69	99	119	14	3.8	2.1	4.4
9	5.2	9.0	5.8	32	22	71	110	108	13	4.7	2.2	3.8
10	7.5	8.6	5.6	38	20	77	121	99	12	3.6	2.2	3.3
11	14	9.2	4.5	54	21	79	141	90	12	3.3	2.1	3.1
12	10	9.1	6.0	70	20	71	165	82	12	3.3	2.1	2.9
13	8.0	8.6	7.0	110	20	66	168	84	11	3.3	2.5	2.9
14	7.1	8.1	7.0	140	19	62	153	95	11	3.3	2.2	2.9
15	6.7	8.0	7.0	130	19	61	134	103	11	2.9	1.9	2.9
16	6.3	8.0	9.0	307	20	65	123	105	11	2.9	1.8	3.1
17	6.3	10	14	201	22	76	123	99	12	2.9	1.9	3.1
18	6.0	10	29	142	21	71	110	90	12	2.7	1.9	3.3
19	6.0	8.9	60	110	17	88	103	72	10	2.9	1.9	3.6
20	6.0	8.6	120	87	17	97	97	62	8.5	3.1	1.9	4.1
21	6.0	8.4	250	70	18	101	97	54	7.6	3.1	2.1	4.1
22	6.0	8.2	320	52	17	93	103	45	7.2	3.1	1.8	4.1
23	5.6	8.4	210	50	18	84	105	39	7.2	3.6	1.9	6.0
24	5.6	9.0	136	54	28	84	101	48	7.2	2.9	2.2	11
25	5.9	12	102	35	37	93	103	58	7.6	2.5	2.7	11
26	5.6	33	85	35	41	99	112	44	7.6	2.2	2.7	7.2
27	5.6	25	81	37	54	88	125	38	7.2	2.2	2.5	5.3
28	6.2	19	76	34	65	80	119	34	6.4	2.1	2.5	5.0
29	6.9	17	62	32	------	74	105	30	5.6	2.1	2.5	4.4
30	8.7	14	48	29	------	76	93	27	5.0	2.2	2.1	4.1
31	9.3	------	49	27	------	88	------	25	------	2.1	2.2	------
TOTAL	201.3	349.5	1,780.3	2,144	701	2,470	3,360	2,330	349.1	102.2	67.7	124.6
MEAN	6.49	11.7	57.4	69.2	25.0	79.7	112	75.2	11.6	3.30	2.18	4.15
MAX	14	33	320	307	65	101	168	119	23	5.0	2.9	11
MIN	4.9	7.6	4.5	27	17	61	77	25	5.0	2.1	1.6	2.1
AC-FT	399	693	3,530	4,250	1,390	4,900	6,660	4,620	692	203	134	247

CAL YR 1972 TOTAL 46,353.7 MEAN 127 MAX 1,920 MIN 2.4 AC-FT 91,940
WTR YR 1973 TOTAL 13,979.7 MEAN 38.3 MAX 320 MIN 1.6 AC-FT 27,730

PEAK DISCHARGE (BASE, 550 CFS).--Jan. 16 (1300) 574 cfs (2.54 ft).

14043560 SNIPE CREEK NEAR UKIAH, OREG.

LOCATION.--Lat 45°11'05", long 118°56'20", in SW¼SW¼ sec.26, T.4 S., R.31 E., Umatilla County, on left bank at northern tip of oxbow in creek, 3.5 mi (5.6 km) north of Ukiah and at mile 1.4 (2.3 km).

DRAINAGE AREA.--37 mi^2 (96 km^2), approximately.

PERIOD OF RECORD.--October 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 3,430 ft (1,045 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 12.6 ft^3/s (0.36 m^3/s), 9,130 acre-ft/yr (11.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 87 ft^3/s (2.46 m^3/s) Mar. 1, gage height, 3.42 ft (1.042 m); maximum gage height, 3.91 ft (1.192 m) Jan. 16 (ice jam); no flow July 11 to Sept. 30.
Period of record: Maximum discharge, 717 ft^3/s (20.3 m^3/s) Mar. 13, 1972, gage height, 5.61 ft (1.710 m); no flow at times.

REMARKS.--Records poor. No regulation. Several diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.41	.31	.77	3.1	71	14	3.2	.54	.05		
2	.26	.40	.40	.73	3.5	40	9.2	2.8	.54	.05		
3	.26	.43	.29	.69	4.0	29	8.6	2.7	.54	.04		
4	.26	.46	.23	.72	4.6	30	9.1	2.9	.50	.03		
5	.26	.43	.13	.64	5.2	24	9.8	2.3	.43	.03		
6	.26	.43	.08	.62	5.0	20	9.4	1.9	.36	.03		
7	.26	.36	.09	.56	4.7	19	8.2	1.7	.36	.02		
8	.26	.33	.08	.26	4.5	18	7.7	1.9	.33	.02		
9	.28	.33	.07	.19	4.6	17	8.1	1.6	.33	.01		
10	.33	.33	.05	.22	4.4	22	6.0	1.3	.33	.01		
11	.50	.33	.04	.30	4.2	18	8.1	1.1	.30	0		
12	.50	.33	.05	.60	4.2	13	10	1.0	.30	0		
13	.43	.30	.04	1.6	4.5	12	10	.94	.30	0		
14	.36	.30	.04	3.5	4.8	10	9.3	1.0	.30	0		
15	.36	.33	.03	6.0	5.2	9.5	8.2	1.1	.28	0		
16	.33	.36	.02	50	5.0	11	8.7	1.1	.30	0		
17	.33	.46	.02	34	4.8	15	9.9	.94	.43	0		
18	.33	.44	.06	17	4.8	15	8.3	.84	.40	0		
19	.33	.40	.17	9.8	4.5	14	9.1	.76	.28	0		
20	.33	.35	1.0	5.1	4.3	12	8.8	.71	.17	0		
21	.33	.28	3.0	3.5	4.5	12	6.7	.76	.10	0		
22	.33	.23	9.0	3.0	4.4	11	6.0	.76	.09	0		
23	.32	.22	4.9	2.8	4.5	9.6	6.0	.71	.08	0		
24	.31	.28	3.9	3.1	5.0	10	5.6	1.5	.09	0		
25	.32	.36	2.3	3.6	7.0	12	5.2	2.1	.09	0		
26	.31	.48	2.6	3.1	18	12	4.8	1.2	.13	0		
27	.31	.39	2.3	2.6	32	9.9	4.6	.98	.11	0		
28	.33	.43	1.0	3.2	43	9.8	4.2	.86	.09	0		
29	.36	.43	.82	2.9	------	9.0	4.1	.76	.07	0		
30	.39	.40	.91	2.7	------	10	3.6	.71	.05	0		
31	.43	------	.82	2.8	------	19	------	.71	------	0		------
TOTAL	10.25	11.01	34.75	166.60	208.3	543.8	233.3	42.84	8.22	.29	0	0
MEAN	.33	.37	1.12	5.37	7.44	17.5	7.78	1.38	.27	.009	0	0
MAX	.50	.48	9.0	50	43	71	14	3.2	.54	.05	0	0
MIN	.26	.22	.02	.19	3.1	9.0	3.6	.71	.05	0	0	0
AC-FT	20	22	69	330	413	1.080	463	85	16	.6	0	0

CAL YR 1972 TOTAL 7.847.43 MEAN 21.4 MAX 546 MIN .01 AC-FT 15.570
WTR YR 1973 TOTAL 1.259.36 MEAN 3.45 MAX 71 MIN 0 AC-FT 2.500

PEAK DISCHARGE (BASE, 80 CFS).--Mar. 1 (0400) 87 cfs (3.42 ft).

NOTE.--No gage-height record Jan. 22 to Feb. 27, July 11 to Sept. 30.

14044000 MIDDLE FORK JOHN DAY RIVER AT RITTER, OREG.

LOCATION.--Lat 44°53'20", long 119°08'25", in SW¼NW¼ sec.8, T.8 S., R.30 E., Grant County, on left bank 0.2 mi (0.3 km) south of Ritter, 0.8 mi (1.3 km) downstream from Twelvemile Creek, and at mile 14.9 (24.0 km).

DRAINAGE AREA.--515 mi^2 (1,334 km^2).

PERIOD OF RECORD.--October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,544.56 ft (775.582 m) above mean sea level.

AVERAGE DISCHARGE.--44 years, 238 ft^3/s (6.740 m^3/s), 172,400 acre-ft/yr (213 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 865 ft^3/s (24.5 m^3/s) Jan. 16, gage height, 4.65 ft (1.417 m); minimum, 2.9 ft^3/s (0.082 m^3/s) Dec. 6.

Period of record: Maximum discharge, 4,730 ft^3/s (134 m^3/s) Jan. 30, 1965, gage height, 8.39 ft (2.557 m), from rating curve extended above 2,200 ft^3/s (62.3 m^3/s); maximum gage height, 9.13 ft (2.783 m) Feb. 1, 1963, ice jam; minimum discharge, 0.90 ft^3/s (0.025 m^3/s) Aug. 19, 20, 1966.

REMARKS.--Records excellent. No regulation. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 739: 1931. WSP 1218: 1950. WSP 1448: 1930-32, 1937, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	45	63	75	70	222	232	279	205	32	6.6	9.9
2	42	53	64	71	82	219	210	272	181	31	7.2	11
3	40	54	62	67	80	201	200	293	167	30	7.2	10
4	39	60	39	59	83	199	210	370	153	27	7.5	9.1
5	38	75	6.6	62	87	202	249	434	137	27	7.8	9.1
6	38	62	4.2	62	94	194	280	399	118	26	7.8	9.1
7	37	52	4.4	60	86	187	262	363	107	25	7.5	12
8	38	53	3.5	58	82	187	245	391	102	25	7.2	16
9	39	54	3.1	52	83	192	257	379	96	23	7.2	17
10	43	50	6.0	62	85	193	267	341	93	21	7.8	15
11	49	53	9.0	72	86	208	304	308	87	20	9.1	16
12	54	58	12	102	86	186	354	307	83	19	10	15
13	51	55	10	167	86	178	450	346	80	18	10	13
14	46	52	20	268	84	162	470	414	75	16	7.8	13
15	43	51	26	201	90	152	396	483	71	16	6.3	9.1
16	43	51	40	337	91	160	347	544	71	15	5.9	13
17	42	53	76	463	100	195	363	562	74	15	5.9	14
18	41	57	111	278	98	185	333	563	78	15	6.3	15
19	40	56	175	198	98	201	322	501	70	13	6.3	17
20	40	51	232	139	100	193	308	444	63	13	6.3	21
21	40	46	317	123	98	221	291	362	57	14	6.3	31
22	39	33	398	102	99	241	288	322	52	16	5.3	30
23	38	47	362	97	99	220	290	298	50	14	6.3	30
24	38	50	301	94	105	234	280	345	50	12	7.2	49
25	38	62	234	102	113	264	282	432	50	12	9.9	74
26	38	101	178	92	126	292	306	317	44	8.2	10	68
27	38	164	138	75	148	270	360	274	42	8.2	13	46
28	40	89	125	74	177	244	372	246	42	7.8	13	39
29	42	76	102	69	------	220	334	229	33	7.2	12	35
30	39	68	77	85	------	210	301	215	33	6.9	11	32
31	35	------	79	87	------	246	------	214	------	6.9	10	------
TOTAL	1,271	1,831	3,277.8	3,853	2,716	6,476	9,143	11,247	2,564	540.2	251.7	698.3
MEAN	41.0	61.0	106	124	97.0	209	305	363	85.5	17.4	8.12	23.3
MAX	54	164	398	463	177	292	470	563	205	32	13	74
MIN	35	33	3.1	52	70	152	200	214	33	6.9	5.3	9.1
AC-FT	2,520	3,630	6,500	7,640	5,390	12,850	18,170	22,310	5,090	1,070	499	1,390

CAL YR 1972 TOTAL 129,947.8 MEAN 355 MAX 2,500 MIN 3.1 AC-FT 257,800
WTR YR 1973 TOTAL 43,889.0 MEAN 120 MAX 563 MIN 3.1 AC-FT 87,050

PEAK DISCHARGE (BASE, 760 CFS).--Jan. 16 (1700) 865 cfs (4.65 ft).

14046000 NORTH FORK JOHN DAY RIVER AT MONUMENT, OREG.

LOCATION.--Lat 44°48'50", long 119°25'50", in SE¼ sec.2, T.9 S., R.27 E., Grant County, on right bank just downstream from entrance to canyon, 0.7 mi (1.1 km) downstream from Cottonwood Creek, 0.8 mi (1.3 km) west of Monument, and at mile 15.3 (24.6 km).

DRAINAGE AREA.--2,520 mi^2 (6,530 km^2), approximately.

PERIOD OF RECORD.--March 1925 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,959.64 ft (597.298 m) above mean sea level. Prior to Nov. 24, 1925, nonrecording gage and Nov. 24, 1925, to Oct. 16, 1928, water-stage recorder at datum 1.10 ft (0.335 m) higher. Oct. 17, 1928, to Sept. 30, 1930, water-stage recorder at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--48 years, 1,203 ft^3/s (34.1 m^3/s), 871,600 acre-ft/yr (1.07 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,700 ft^3/s (133 m^3/s) Jan. 16, gage height, 7.23 ft (2.204 m); minimum, 32 ft^3/s (0.91 m^3/s) Aug. 18, 19.

Period of record: Maximum discharge, 33,400 ft^3/s (946 m^3/s) Jan. 30, 1965, gage height, 18.45 ft (5.624 m), from rating curve extended above 17,000 ft^3/s (481 m^3/s); minimum, 6 ft^3/s (0.17 m^3/s) sometime during period Nov. 2-13, 1936 (result of freezeup); minimum daily, 17 ft^3/s (0.48 m^3/s) Dec. 12, 1932.

REMARKS.--Records excellent. Very slight regulation by small reservoirs upstream. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 754: 1932(M). WSP 1448: 1927, 1931(M), 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	142	241	378	384	1,420	1,000	1,380	1,100	167	50	41
2	144	175	229	386	360	1,390	894	1,340	962	162	49	41
3	142	208	241	378	378	1,130	838	1,390	867	154	48	41
4	137	229	186	292	402	1,050	870	1,890	797	146	50	41
5	134	265	97	288	444	1,020	1,040	2,210	734	139	51	41
6	131	283	51	292	498	966	1,210	2,150	685	131	58	40
7	131	229	45	280	456	896	1,170	1,980	646	128	53	52
8	131	201	39	280	420	886	1,090	2,090	624	124	47	55
9	134	201	39	250	408	894	1,140	2,120	582	120	47	62
10	147	194	40	300	438	902	1,220	1,920	560	113	46	65
11	175	187	47	420	504	1,030	1,410	1,720	518	106	46	62
12	197	197	52	700	468	896	1,710	1,630	478	102	47	57
13	208	204	50	1,300	450	830	2,070	1,750	446	97	49	52
14	186	194	58	1,700	438	766	2,170	2,060	426	93	46	51
15	169	186	70	1,260	456	718	1,910	2,500	401	89	42	48
16	163	181	90	2,420	504	702	1,650	2,770	386	85	36	48
17	163	187	120	2,800	546	806	1,630	2,870	388	82	34	49
18	157	197	250	1,690	582	814	1,520	2,800	416	78	34	56
19	155	201	350	1,220	540	856	1,410	2,530	392	77	34	62
20	152	190	500	870	498	862	1,330	2,290	366	78	35	70
21	152	172	642	750	474	910	1,230	1,910	305	79	35	77
22	152	142	920	621	468	946	1,250	1,650	278	82	34	98
23	150	82	1,230	528	468	878	1,320	1,490	258	80	33	100
24	150	106	1,340	570	480	862	1,300	1,540	247	77	35	105
25	147	178	1,000	600	552	973	1,360	2,200	245	71	39	152
26	147	218	774	516	678	1,110	1,490	1,720	239	68	43	216
27	147	540	679	360	782	1,070	1,800	1,490	224	66	44	190
28	150	420	614	360	902	982	1,920	1,230	211	60	47	142
29	150	310	540	414	------	894	1,730	1,130	193	59	49	122
30	152	283	456	456	------	854	1,530	1,070	174	57	47	109
31	142	------	432	450	------	973	------	1,060	------	53	44	------
TOTAL	4,740	6,500	11,419	23,127	13,978	29,260	42,192	57,790	14,126	3,020	1,352	2,345
MEAN	153	217	368	746	499	944	1,406	1,864	471	97.4	43.6	78.2
MAX	208	540	1,340	2,800	902	1,420	2,170	2,870	1,100	167	58	216
MIN	131	82	39	250	360	702	838	1,060	174	53	33	40
AC-FT	9,400	12,890	22,650	45,870	27,730	58,040	83,690	114,600	28,020	5,990	2,680	4,650

CAL YR 1972 TOTAL 3,650,981 MEAN 9,975 MAX 15,500 MIN 39 AC-FT 7,242,000
WTR YR 1973 TOTAL 209,849 MEAN 575 MAX 2,870 MIN 33 AC-FT 416,200

PEAK DISCHARGE (BASE, 5,300 CFS).--No peak above base.

14046500 JOHN DAY RIVER AT SERVICE CREEK, OREG.

LOCATION.--Lat 44°47'38", long 120°00'20", in NE¼NE¼ sec.18, T.9 S., R.23 E., Wheeler County, on left bank 0.2 mi (0.3 km) downstream from bridge on State Highway 207, 0.8 mi (1.3 km) downstream from Service Creek. 0.5 mi (0.8 km) southwest of town of Service Creek, and at mile 156.7 (252.1 km).

DRAINAGE AREA.--5,090 mi^2 (13,200 km^2), approximately.

PERIOD OF RECORD.--March 1925 to September 1926, October 1929 to current year. Monthly discharge only March 1925 to September 1926, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,632.42 ft (497.562 m) above mean sea level. See WSP 1738 for history of changes prior to Feb. 24, 1957.

AVERAGE DISCHARGE.--45 years, 1,798 ft^3/s (50.9 m^3/s), 1,303,000 acre-ft/yr (1.61 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,610 ft^3/s (159 m^3/s) Jan. 17, gage height, 7.06 ft (2.152 m); minimum, 6.0 ft^3/s (0.17 m^3/s) Aug. 23, 24

Period of record: Maximum discharge, 40,200 ft^3/s (1,140 m^3/s) Dec. 23, 1964, gage height, 17.85 ft (5.441 m), from rating curve extended above 14,000 ft^3/s (396 m^3/s) on basis of slope-area measurement of peak flow; minimum, 20 ft^3/s (0.57 m^3/s) Sept. 6, 1931.

REMARKS.--Records excellent. Very slight regulation by several small reservoirs above station. Many small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	318	367	540	780	790	1,610	1,500	2,100	1,520	222	24	33
2	306	374	500	715	715	2,140	1,430	1,940	1,490	218	23	32
3	295	416	500	760	733	1,750	1,300	1,920	1,340	199	20	28
4	285	458	493	625	742	1,570	1,270	2,340	1,250	173	19	25
5	270	479	362	532	780	1,540	1,360	2,940	1,140	155	17	25
6	265	532	275	490	840	1,470	1,600	3,150	1,060	142	15	26
7	265	516	218	480	882	1,390	1,720	2,930	978	122	16	28
8	280	472	190	460	810	1,350	1,610	2,790	915	117	19	35
9	295	451	185	450	780	1,360	1,590	2,980	854	124	22	50
10	312	451	185	480	770	1,370	1,700	2,750	791	113	19	50
11	348	444	210	580	850	1,490	1,830	2,510	751	102	16	56
12	395	444	240	700	871	1,480	2,160	2,280	696	92	14	60
13	444	451	260	970	830	1,330	2,670	2,260	645	84	14	57
14	437	451	300	2,250	820	1,290	3,030	2,510	598	77	15	51
15	409	437	290	1,830	800	1,200	2,850	2,870	571	76	16	49
16	395	430	330	2,220	840	1,150	2,530	3,450	551	73	15	45
17	395	437	450	4,650	882	1,190	2,350	3,560	539	67	14	44
18	388	444	740	3,020	970	1,300	2,330	3,510	562	63	12	44
19	381	458	880	2,270	948	1,230	2,160	3,360	619	61	9.7	47
20	367	458	1,100	1,650	882	1,330	2,060	3,060	560	58	8.4	56
21	360	444	1,220	1,340	850	1,320	1,930	2,730	507	50	7.9	65
22	360	423	1,750	1,210	827	1,400	1,830	2,330	449	53	7.0	75
23	360	381	2,000	994	820	1,380	1,930	2,080	432	53	6.2	94
24	354	330	2,100	1,020	827	1,290	1,950	2,000	387	55	6.2	121
25	348	362	1,700	1,080	856	1,340	1,890	2,610	364	49	8.8	131
26	348	437	1,360	1,030	988	1,500	2,030	2,890	358	44	10	172
27	348	486	1,250	830	1,130	1,600	2,310	2,260	345	41	16	250
28	360	860	1,140	679	1,300	1,500	2,650	1,960	314	38	16	252
29	360	663	1,040	760	------	1,410	2,580	1,710	282	34	19	210
30	374	572	926	820	------	1,330	2,310	1,570	243	29	21	180
31	381	------	830	850	------	1,350	------	1,480	------	25	25	------
TOTAL	10,803	13,888	23,544	36,525	24,133	43,960	60,460	78,810	21,111	2,809	471.2	2,391
MEAN	348	463	759	1,178	862	1,418	2,015	2,542	704	90.6	15.2	79.7
MAX	444	860	2,100	4,650	1,300	2,140	3,030	3,560	1,520	222	25	252
MIN	265	330	185	450	715	1,150	1,270	1,480	243	25	6.2	25
AC-FT	21,430	27,550	46,700	72,450	47,870	87,190	119,900	156,300	41,870	5,570	935	4,740

CAL YR 1972 TOTAL 943,192.0 MEAN 2,577 MAX 21,600 MIN 91 AC-FT 1,871,000
WTR YR 1973 TOTAL 318,905.2 MEAN 874 MAX 4,650 MIN 6.2 AC-FT 632,500

PEAK DISCHARGE (BASE, 7,300 CFS).--No peak above base.

14048000 JOHN DAY RIVER AT MCDONALD FERRY, OREG.

LOCATION.--Lat 45°35'16", long 120°24'30", in NE¼NW¼ sec.11, T.1 N., R.19 E., Sherman County, on left bank at McDonald Ferry, 0.8 mi (1.3 km) downstream from Rock Creek, 10 mi (16 km) east of Klondike, and at mile 20.9 (33.6 km).

DRAINAGE AREA.--7,580 mi^2 (19,600 km^2), approximately.

PERIOD OF RECORD.--December 1904 to current year. Prior to Oct. 1, 1930, published as "at McDonald."

GAGE.--Water-stage recorder. Datum of gage is 392.27 ft (119.564 m) above mean sea level. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--68 years (1905-73), 1,989 ft^3/s (56.33 m^3/s), 1,441,000 acre-ft/yr (1.78 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,850 ft^3/s (137 m^3/s) Jan. 18, gage height, 5.17 ft (1.576 m); no flow Aug. 15 to Sept. 16.

Period of record: Maximum discharge, 42,800 ft^3/s (1,210 m^3/s) Dec. 24, 1964, gage height, 13.59 ft (4.142 m), from floodmark, from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of slope-area measurement of peak flow; no flow for part of Sept. 2, 1966, Aug. 15 to Sept. 16, 1973.

Flood of 1894 reached a stage of 12.8 ft (3.90 m), from floodmarks, discharge, 39,100 ft^3/s (1,110 m^3/s), from rating curve extended above 22,000 ft^3/s (623 m^3/s).

REMARKS.--Records good except those for winter months, which are fair. No regulation. Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1094: 1894(M), 1932(M). WSP 1448: 1908-9, 1912, 1916, 1920(M), 1922, 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	352	652	760	903	1,250	1,360	2,260	1,450	247	25	0
2	315	359	580	680	914	1,450	1,440	2,040	1,380	241	25	0
3	303	373	546	634	850	1,850	1,490	1,890	1,480	216	20	0
4	297	366	529	598	770	2,200	1,390	1,800	1,360	211	17	0
5	274	387	447	580	790	1,900	1,290	1,920	1,230	192	16	0
6	263	431	321	479	800	1,700	1,290	2,530	1,150	178	16	0
7	269	471	270	285	810	1,600	1,420	2,950	1,040	165	15	0
8	263	504	190	280	810	1,550	1,650	2,810	947	144	14	0
9	263	529	160	220	810	1,520	1,620	2,600	870	133	13	0
10	263	479	140	250	810	1,490	1,550	2,740	820	122	12	0
11	280	447	130	300	810	1,510	1,560	2,620	770	110	2.0	0
12	303	447	130	400	810	1,520	1,650	2,400	730	100	.70	0
13	352	439	140	670	810	1,680	1,890	2,160	690	88	.70	0
14	359	439	150	1,120	810	1,520	2,310	2,070	643	81	.20	0
15	394	439	160	1,490	810	1,430	2,790	2,160	589	67	0	0
16	431	447	210	2,050	810	1,360	2,790	2,500	546	48	0	.30
17	415	455	300	1,860	820	1,290	2,470	3,100	529	37	0	.50
18	387	439	420	4,160	860	1,250	2,230	3,340	504	46	0	5.7
19	380	423	580	2,970	870	1,320	2,240	3,320	495	72	0	24
20	373	431	780	2,230	880	1,380	2,080	3,240	495	65	0	24
21	366	439	1,070	1,720	890	1,340	1,990	2,970	555	55	0	20
22	352	447	1,320	1,320	900	1,380	1,920	2,700	529	50	0	16
23	345	447	1,590	1,150	900	1,400	1,770	2,310	463	50	0	18
24	352	415	1,870	1,000	900	1,450	1,770	2,100	423	50	0	39
25	352	401	1,720	860	910	1,390	1,830	1,960	408	46	0	49
26	339	359	1,830	881	920	1,340	1,790	2,130	380	50	0	62
27	339	321	1,430	903	950	1,440	1,830	2,900	327	44	0	47
28	345	366	1,160	830	1,050	1,580	1,990	2,310	303	39	0	129
29	339	447	1,030	690	------	1,580	2,350	1,980	291	29	0	149
30	339	780	936	680	------	1,480	2,470	1,730	263	26	0	196
31	352	------	860	881	------	1,420	------	1,560	------	29	0	------
TOTAL	10,325	13,079	21,651	32,931	23,977	46,570	56,220	75,100	21,660	3,030	176.60	819.50
MEAN	333	436	698	1,062	856	1,502	1,874	2,423	722	97.7	5.70	27.3
MAX	431	780	1,870	4,160	1,050	2,200	2,790	3,340	1,480	247	25	196
MIN	263	321	130	220	770	1,250	1,290	1,560	263	26	0	0
AC-FT	20,480	25,940	42,940	65,320	47,560	92,370	111,500	149,000	42,960	6,010	350	1,630

CAL YR 1972 TOTAL 985,582.00 MEAN 2,693 MAX 22,800 MIN 70 AC-FT 1,955,000
WTR YR 1973 TOTAL 305,539.10 MEAN 837 MAX 4,160 MIN 0 AC-FT 606,000

PEAK DISCHARGE (BASE, 6,900 CFS).--No peak above base.

14050000 DESCHUTES RIVER BELOW SNOW CREEK, NEAR LA PINE, OREG.

LOCATION.--Lat 43°48'51", long 121°46'33", in NW¼ sec.28, T.20 S., R.8 E., Deschutes County, in Deschutes National Forest, on left bank at flow line of Crane Prairie Reservoir, 20 ft (6 m) downstream from Snow Creek, 300 ft (91 m) upstream from highway bridge, and 17 mi (27 km) northwest of La Pine.

DRAINAGE AREA.--132 mi^2 (342 km^2), including Sparks, Elk, and Mud Lake basins, which have no surface outflow to Deschutes River; hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only October 1937, published in WSP 1318. Published as "near Lapine" 1937-64.

GAGE.--Water-stage recorder. Altitude of gage is 4,445 ft (1,355 m), from elevation of Crane Prairie Reservoir when slack water extended to gage. Prior to Sept. 10, 1938, nonrecording gage at site 450 ft (137 m) downstream at different datum.

AVERAGE DISCHARGE.--36 years, 153 ft^3/s (4.33 m^3/s), 110,800 acre-ft/yr (137 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 354 ft^3/s (10.0 m^3/s) Oct. 1, gage height, 2.33 ft (0.710 m); maximum gage height, 2.91 ft (0.887 m) Dec. 9, backwater from ice; minimum discharge, 89 ft^3/s (2.52 m^3/s) Sept. 10-17, 21, 29, 30.

Period of record: Maximum discharge, 468 cfs (13.3 m^3/s) Aug. 16, 1972, gage height, 3.09 ft (0.942 m); maximum gage height, 4.12 ft (1.256 m) Jan. 21, 1943 (ice jam); minimum discharge, 40 ft^3/s (1.13 m^3/s) sometime during period Dec. 22, 1959, to Mar. 2, 1960, result of freezeup; minimum daily, 55 ft^3/s (1.56 m^3/s) for many days April to June 1941.

REMARKS.--Records excellent. No regulation. Crater Creek Canal diverts water to Tumalo Creek basin from tributaries of Soda Creek. Stream is spring fed and peak discharge may occur several months after the precipitation which caused it.

REVISIONS (WATER YEARS).--WSP 1248: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	354	265	208	175	142	119	114	96	101	94	103	98
2	350	262	208	175	142	119	114	96	101	94	103	98
3	348	265	208	175	139	119	111	96	101	94	103	98
4	344	265	205	172	139	119	111	98	98	94	103	98
5	340	262	202	172	139	119	111	101	96	94	103	96
6	336	256	205	169	139	119	111	101	96	94	106	96
7	332	256	199	166	136	119	111	101	96	94	106	98
8	330	253	199	163	136	116	111	101	96	96	106	94
9	328	253	196	163	136	116	111	101	96	96	106	94
10	328	247	196	163	136	116	111	101	96	96	106	92
11	328	244	193	166	133	116	111	101	96	98	106	92
12	322	241	193	172	133	116	111	101	96	98	106	89
13	324	238	193	169	133	116	111	101	96	98	106	89
14	318	235	193	163	130	116	111	101	96	98	106	89
15	314	232	190	163	127	116	111	101	96	98	103	89
16	312	232	193	169	127	116	111	101	98	98	103	89
17	310	232	202	166	127	116	111	101	98	98	103	89
18	307	229	196	163	125	116	111	101	98	98	103	92
19	304	226	205	160	122	116	108	101	96	98	103	92
20	298	223	199	160	122	116	103	101	96	98	103	92
21	295	223	202	157	122	116	101	101	96	98	103	92
22	292	220	202	154	122	116	98	101	96	98	103	92
23	286	220	199	151	122	116	98	101	96	98	103	94
24	280	217	196	151	122	114	96	103	96	98	103	96
25	280	217	190	151	122	114	96	103	96	96	101	94
26	280	217	190	151	122	114	96	101	96	98	101	92
27	277	217	190	145	119	114	96	101	96	98	101	92
28	277	214	187	145	119	114	96	101	94	98	98	92
29	271	211	181	145	------	114	96	101	94	101	98	89
30	268	211	181	145	------	114	96	101	94	101	98	89
31	265	------	178	145	------	114	------	101	------	101	98	------
TOTAL	9,598	7,083	6,079	4,984	3,633	3,601	3,184	3,117	2,897	3,011	3,194	2,786
MEAN	310	236	196	161	130	116	106	101	96.6	97.1	103	92.9
MAX	354	265	208	175	142	119	114	103	101	101	106	98
MIN	265	211	178	145	119	114	96	96	94	94	98	89
AC-FT	19,040	14,050	12,060	9,890	7,210	7,140	6,320	6,180	5,750	5,970	6,340	5,530

CAL YR 1972 TOTAL 91,337 MEAN 250 MAX 467 MIN 116 AC-FT 181,200
WTR YR 1973 TOTAL 53,167 MEAN 146 MAX 354 MIN 89 AC-FT 105,500

14050500 CULTUS RIVER ABOVE CULTUS CREEK, NEAR LA PINE, OREG.

LOCATION.--Lat 43°49'06", long 121°47'40", near line between secs.20 and 29, T.20 S., R.8 E., Deschutes County, Deschutes National Forest, on left bank at highway culvert, 2 mi (3 km) upstream from Cultus Creek, and 18 mi (29 km) northwest of La Pine.

DRAINAGE AREA.--16.5 mi^2 (42.7 km^2), hydrologic drainage boundry uncertain owing to ground-water exchange.

PERIOD OF RECORD.--October 1922 to September 1925, October 1937 to current year. Monthly discharge only October 1937, published in WSP 1318. Prior to Oct. 1, 1964, published as "near Lapine."

GAGE.--Water-stage recorder and cement bag control. Altitude of gage is 4,450 ft (1,356 m), by barometer. Oct. 1, 1922, to Sept. 30, 1925, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--39 years, 63.3 ft^3/s (1.79 m^3/s), 45,860 acre-ft/yr (56.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 96 ft^3/s (2.72 m^3/s) Oct. 13, gage height, 0.96 ft (0.293 m); minimum, 42 ft^3/s (1.19 m^3/s) Sept. 26-30.

Period of record: Maximum discharge, 178 ft^3/s (5.04 m^3/s) May 31, 1956, gage height, 1.04 ft (0.317 m); maximum gage height, 1.32 ft (0.402 m) May 16, 1972 (backwater from Crane Prairie Reservoir); minimum discharge, 26 ft^3/s (0.74 m^3/s) May 26-31, Nov. 23 to Dec. 4, 1959.

REMARKS.--Records good. No regulation or diversions above station.

REVISIONS (WATER YEARS).--WSP 1448: 1923-25, 1947.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	90	83	74	70	58	54	52	52	54	52	48
2	93	90	83	74	67	58	54	52	52	54	52	48
3	93	90	83	74	67	58	54	52	52	54	52	48
4	93	90	78	74	67	58	54	52	52	54	52	48
5	93	90	78	74	67	58	54	52	52	54	52	48
6	93	90	78	74	65	58	54	52	52	54	52	48
7	93	90	78	74	65	56	54	52	52	54	52	46
8	93	90	78	74	65	56	54	52	52	54	52	46
9	93	90	78	74	63	56	54	50	52	54	52	46
10	93	90	78	74	63	56	54	50	52	54	52	46
11	93	90	78	74	63	56	54	50	52	54	52	46
12	93	88	76	74	63	56	54	50	52	54	52	46
13	93	88	76	74	63	56	54	50	52	54	52	46
14	93	88	72	74	63	56	54	50	52	54	52	46
15	93	88	72	74	63	56	54	52	52	54	52	46
16	93	88	72	74	63	56	52	52	52	54	52	46
17	93	88	72	74	63	56	52	52	52	54	52	46
18	93	88	72	74	63	56	52	52	52	54	52	46
19	93	88	72	74	60	56	52	52	52	54	50	46
20	93	88	72	74	60	56	52	54	52	54	50	46
21	93	88	72	74	60	56	52	54	52	54	50	46
22	93	88	72	74	60	56	52	54	52	54	50	46
23	93	83	72	74	60	56	52	54	52	54	50	46
24	93	83	74	74	60	56	52	54	52	54	50	44
25	93	83	74	74	58	56	52	54	52	54	50	42
26	93	83	74	74	58	56	52	54	52	54	50	42
27	93	83	74	72	58	56	52	54	54	54	50	42
28	93	83	74	72	58	56	52	52	54	52	50	42
29	93	83	74	72	------	56	52	52	54	52	48	42
30	93	83	74	72	------	56	52	52	54	52	48	42
31	90	------	74	72	------	56	------	52	------	52	48	------
TOTAL	2,880	2,622	2,337	2,284	1,755	1,748	1,590	1,616	1,568	1,666	1,580	1,370
MEAN	92.9	87.4	75.4	73.7	62.7	56.4	53.0	52.1	52.3	53.7	51.0	45.7
MAX	93	90	83	74	70	58	54	54	54	54	52	48
MIN	90	83	72	72	58	56	52	50	52	52	48	42
AC-FT	5,710	5,200	4,640	4,530	3,480	3,470	3,150	3,210	3,110	3,300	3,130	2,720

CAL YR 1972 TOTAL 31,175 MEAN 85.2 MAX 109 MIN 52 AC-FT 61,840
WTR YR 1973 TOTAL 23,016 MEAN 63.1 MAX 93 MIN 42 AC-FT 45,650

14051000 CULTUS CREEK ABOVE CRANE PRAIRIE RESERVOIR, NEAR LA PINE, OREG.

LOCATION.--Lat 43°49'17", long 121°49'22", in SW¼ sec.19, T.20 S., R.8 E., Deschutes County, on left bank 1,000 ft (305 m) upstream from highway bridge, 1.0 mi (1.6 km) downstream from Cultus Lake, and 19 mi (31 km) northwest of La Pine.

DRAINAGE AREA.--33.2 mi^2 (86.0 km^2), hydrologic drainage boundary uncertain owing to groung-water exchange.

PERIOD OF RECORD.--March to September 1924 (published as above Crane Prairie, near Lapine"), October 1937 to current year. Monthly discharge only October 1937 to September 1949, published in WSP 1318. Records for October 1923 to February 1924, published in WSP 594, have been found to be unreliable and should not be used. Published as "near Lapine" 1937-64.

GAGE.--Water-stage recorder. Altitude of gage is 4,545 ft (1,385 m), by barometer. Mar. 1 to Sept. 30, 1924, nonrecording gage at site 100 ft (30 m) upstream at different datum.

AVERAGE DISCHARGE.--36 years (1937-73), 22.7 ft^3/s (0.64 m^3/s), 16,450 acre-ft/yr (20.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 41 ft^3/s (1.16 m^3/s) May 24, 25; maximum gage height, 1.97 ft (0.600 m) May 25; no flow at times.

Period of record: Maximum discharge, 336 ft^3/s (9.52 m^3/s) Dec. 25, 1964, gage height, 4.15 ft (1.265 m), from floodmark, from rating curve extended above 90 ft^3/s (2.55 m^3/s); no flow at times.

REVISIONS.--The minimum discharge for the water year 1972 has been revised to 0.70 ft^3/s (0.02 m^3/s) Sept. 21, 1972, superseding figure published in WRD Oreg. 1972.

REMARKS.--Records good. Some regulation by fish screens at Cultus Lake since 1962. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1568: 1937. See also PERIOD OF RECORD. Revised figures of discharge, in cubic feet per second, for the water year 1972, superseding those published in WRD Oreg. 1972, are given herein.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.5	13	19	22	36	51	34	152	64	12	2.1
2	1.7	2.3	14	18	22	47	49	34	154	60	12	2.1
3	1.7	2.3	14	17	22	55	48	34	159	55	11	1.9
4	1.5	2.3	14	16	22	63	48	35	162	52	11	1.9
5	1.5	2.3	19	16	22	68	48	36	162	51	10	1.7
6	1.5	2.3	23	15	22	73	50	38	162	50	9.8	1.5
7	1.5	2.3	22	14	22	75	53	43	165	49	9.4	1.4
8	1.5	2.3	21	14	22	75	55	47	174	48	8.6	1.3
9	1.5	2.5	22	14	22	74	55	49	177	45	8.2	1.3
10	1.4	2.9	29	15	22	73	54	52	174	44	7.8	1.3
11	1.4	2.9	31	16	22	73	54	53	166	42	7.4	1.1
12	1.4	2.9	26	16	22	74	55	55	156	40	6.6	1.1
13	1.3	3.1	36	16	22	77	54	58	143	38	6.0	1.0
14	1.3	3.5	38	16	22	78	53	64	137	37	5.6	1.0
15	1.3	3.3	38	16	22	79	52	71	135	34	5.2	.90
16	1.3	3.3	36	17	24	78	50	81	128	33	4.9	.90
17	1.3	3.3	35	18	26	77	49	93	119	32	4.9	.80
18	1.1	3.1	34	19	26	77	47	99	113	30	4.9	.80
19	1.4	3.1	32	20	26	77	45	101	108	27	4.6	.80
20	1.5	3.1	31	20	26	75	43	106	104	26	4.6	.80
21	1.5	3.1	29	20	26	73	42	117	97	24	4.2	.80
22	1.5	2.9	29	20	26	73	41	121	93	23	3.8	.90
23	1.7	2.9	28	20	27	71	39	122	88	21	3.5	1.1
24	1.5	3.5	27	20	27	70	38	123	83	20	3.3	1.1
25	1.5	3.8	26	20	28	68	38	121	79	18	3.1	1.1
26	1.7	8.2	25	20	29	65	36	121	74	17	3.1	1.1
27	1.9	9.8	24	20	30	63	36	121	70	16	3.1	1.1
28	1.9	12	23	20	31	61	36	122	70	16	2.9	1.0
29	1.7	13	22	20	32	58	35	129	67	15	2.7	1.0
30	1.9	14	21	20	------	56	34	136	65	14	2.5	1.0
31	2.1	------	20	20	------	53	------	143	------	13	2.3	------
TOTAL	47.7	128.8	802	552	714	2,115	1,388	2,559	3,736	1,054	189.0	35.90
MEAN	1.54	4.29	25.9	17.8	24.6	68.2	46.3	82.5	125	34.0	6.10	1.20
MAX	2.1	14	38	20	32	79	55	143	177	64	12	2.1
MIN	1.1	2.3	13	14	22	36	34	34	65	13	2.3	.80
AC-FT	95	255	1,590	1,090	1,420	4,200	2,750	5,080	7,410	2,090	375	71

CAL YR 1971 TOTAL 13,884.20 MEAN 38.0 MAX 165 MIN 1.1 AC-FT 27,540
WTR YR 1972 TOTAL 13,321.40 MEAN 36.4 MAX 177 MIN .80 AC-FT 26,420

14051000 CULTUS CREEK ABOVE CRANE PRAIRIE RESERVOIR, NEAR LA PINE, OREG. (Continued)

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.70	1.9	24	17	10	7.1	14	33	11	1.2	0
2	.90	.70	1.7	23	17	10	7.1	15	32	10	1.1	0
3	.90	.70	1.5	23	16	9.6	6.7	16	31	9.6	1.0	0
4	.90	.80	1.3	22	16	9.6	6.7	16	29	9.2	.80	0
5	.80	.90	1.1	22	15	9.2	6.7	17	29	8.8	.60	0
6	.70	.90	1.1	21	15	9.6	6.3	18	28	8.3	.50	0
7	.70	.90	1.1	20	15	9.2	6.3	19	27	8.0	.40	0
8	.70	.90	1.0	20	15	9.2	5.9	20	26	7.5	.40	0
9	.70	.90	1.0	19	14	8.8	5.9	21	26	7.1	.30	0
10	.70	1.0	1.0	19	14	9.6	5.9	22	25	6.7	.20	0
11	.80	1.0	1.1	19	14	10	5.9	22	23	5.9	.20	0
12	.90	.90	1.2	21	14	9.6	5.9	23	22	5.9	.10	0
13	1.3	.90	1.4	22	14	9.6	6.7	25	21	5.2	.10	0
14	1.3	1.0	1.3	22	14	9.6	6.7	26	20	5.2	0	0
15	1.1	1.0	1.2	23	14	9.2	7.1	28	19	4.8	0	0
16	1.1	1.0	3.8	25	13	8.8	7.1	30	19	4.5	0	0
17	1.1	1.0	6.7	25	13	9.2	8.3	32	19	4.2	0	0
18	1.0	1.0	7.5	25	12	8.8	9.2	34	19	3.8	0	0
19	1.0	1.0	10	25	12	8.8	11	35	18	3.8	0	0
20	.90	1.1	12	25	12	8.8	12	35	18	3.2	0	0
21	.90	1.1	16	24	11	8.3	12	35	16	2.9	0	0
22	.90	1.1	21	23	11	8.3	12	35	16	2.6	0	0
23	.80	1.1	23	22	10	8.0	12	35	16	2.4	0	0
24	.70	1.1	26	22	10	8.0	12	37	15	2.2	0	.10
25	.70	1.3	26	22	10	8.0	12	38	14	2.2	0	0
26	.70	1.7	26	21	10	7.5	12	37	14	2.0	0	0
27	.70	1.5	26	20	10	7.1	12	37	14	1.8	0	0
28	.70	1.7	27	20	10	7.1	13	35	14	1.6	0	0
29	.70	1.7	26	19	------	6.7	14	35	12	1.6	0	0
30	.50	1.9	26	19	------	7.1	14	34	12	1.4	0	0
31	.50	------	25	18	------	7.1	------	34	------	1.2	0	------
TOTAL	26.20	32.50	326.9	675	368	270.4	269.5	860	627	154.6	6.90	.10
MEAN	.85	1.08	10.5	21.8	13.1	8.72	8.98	27.7	20.9	4.99	.22	.003
MAX	1.3	1.9	27	25	17	10	14	38	33	11	1.2	.10
MIN	.50	.70	1.0	18	10	6.7	5.9	14	12	1.2	0	0
AC-FT	52	64	648	1.340	730	536	535	1.710	1.240	307	14	.2

CAL YR 1972 TOTAL 13.114.10 MEAN 35.8 MAX 177 MIN .50 AC-FT 26.010
WTR YR 1973 TOTAL 3.617.10 MEAN 9.91 MAX 38 MIN 0 AC-FT 7.170

14052000 DEER CREEK ABOVE CRANE PRAIRIE RESERVOIR, NEAR LA PINE, OREG.

LOCATION.--Lat 43°48'48", long 121°50'18", in SE¼SW¼ sec.25, T.20 S., R.7 E., Deschutes County, on right bank 150 ft (146 m) downstream from highway bridge, 1.2 mi (1.9 km) downstream from Little Cultus Lake, and 19 mi (31 km) northwest of La Pine.

DRAINAGE AREA.--21.5 mi^2 (55.7 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--February to September 1924 (published as "above Crane Prairie, near Lapine"), October 1937 to current year. Monthly discharge only October 1937 to September 1949, published in WSP 1318. Records for October 1923 to January 1924, published in WSP 594, have been found to be unreliable and should not be used. Published as "near Lapine" 1937-64.

GAGE.--Water-stage recorder and wooden weir control. Altitude of gage is 4,520 ft (1,378 m), by barometer. Feb. 1 to Sept. 30, 1924, nonrecording gage at site 75 ft (23 m) upstream at various datums. Oct. 1, 1937, to Sept. 30, 1938, water-stage recorder at bridge 150 ft (46 m) upstream at different datum. Oct. 1, 1938, to Aug. 13, 1968, water-stage recorder and wooden weir control at present site and datum 0.60 ft (0.183 m) higher.

AVERAGE DISCHARGE.--36 years (1937-73), 7.52 ft^3/s (0.213 m^3/s), 5,450 acre-ft/yr (6.72 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 16 ft^3/s (0.45 m^3/s) May 17; maximum gage height, 2.06 ft (0.628 m) sometime Dec. 9-20, from recorded range in stage (backwater from ice); no flow at times.
Period of record: Maximum discharge, 200 ft^3/s (5.66 m^3/s), estimated, Dec. 25, 1964; no flow at times.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS.--See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20	1.3	5.5	3.2	2.0	1.8	12	4.3	.20	0	.10
2	0	.20	1.1	4.9	3.0	2.0	1.8	12	3.6	.20	0	.10
3	0	.20	1.0	4.8	2.8	1.9	1.7	12	3.1	.10	.10	.10
4	0	.40	.90	4.6	2.6	1.9	1.8	13	2.8	0	.10	.10
5	0	.60	.90	4.4	2.6	1.8	1.9	13	2.4	0	.10	.10
6	0	.50	.90	4.2	2.6	1.9	2.0	13	2.2	0	0	.10
7	0	.60	.80	3.8	2.5	1.8	2.0	13	2.0	0	0	.20
8	0	.60	.80	3.7	2.4	1.7	2.1	15	1.7	0	0	.10
9	0	.60	.80	3.7	2.3	1.7	2.3	15	1.5	0	0	.10
10	0	.80	.80	3.7	2.5	2.2	2.6	15	1.3	0	0	.10
11	.20	.80	.80	3.8	2.5	2.3	3.0	14	1.3	0	0	0
12	.10	.80	.90	4.0	2.5	2.3	3.6	14	1.2	0	0	0
13	.30	.70	1.0	5.0	2.5	2.2	4.6	14	1.0	0	0	0
14	0	.80	.90	6.0	2.4	2.2	5.0	14	1.0	0	0	.10
15	0	.80	.80	7.3	2.3	2.0	5.5	15	.90	0	0	.10
16	0	.80	1.5	8.8	2.2	1.9	7.3	15	1.1	0	0	.10
17	0	.80	4.0	8.5	2.3	2.0	9.2	16	1.4	0	0	.10
18	0	.80	5.5	8.0	2.5	2.1	9.8	15	1.3	0	0	.10
19	0	.90	7.0	8.2	2.4	1.9	9.2	15	1.3	0	0	0
20	0	.90	10	7.3	2.1	1.8	9.8	13	1.3	0	0	.20
21	0	.90	11	6.7	1.9	1.8	9.5	12	1.3	0	0	.20
22	0	.90	11	6.0	1.8	1.7	9.2	11	1.2	0	0	.20
23	0	.90	11	5.6	1.8	1.6	9.0	10	1.1	0	0	.30
24	0	.90	11	4.9	1.7	1.5	8.8	10	.90	0	.10	.40
25	0	.90	9.8	4.9	1.9	1.5	8.8	9.8	.90	0	.10	.20
26	0	1.8	9.0	4.4	1.9	1.6	9.0	9.0	.90	0	.10	.20
27	0	1.5	8.8	4.2	1.9	1.5	9.5	8.2	.80	0	.10	.20
28	0	1.5	9.0	3.8	1.9	1.5	10	7.3	.80	0	.10	.20
29	0	1.4	7.8	3.5	------	1.5	11	6.5	.60	0	.10	.20
30	0	1.3	6.9	3.5	------	1.6	12	5.9	.30	0	.10	.20
31	0	------	6.1	3.5	------	1.8	------	5.2	------	0	.10	------
TOTAL	.60	24.80	143.10	161.2	65.0	57.2	183.8	372.9	45.50	.50	1.10	4.10
MEAN	.019	.83	4.62	5.20	2.32	1.85	6.13	12.0	1.52	.016	.036	.14
MAX	.30	1.8	11	8.8	3.2	2.3	12	16	4.3	.20	.10	.40
MIN	0	.20	.80	3.5	1.7	1.5	1.7	5.2	.30	0	0	0
AC-FT	1.2	49	284	320	129	113	365	740	90	1.0	2.2	8.1

CAL YR 1972 TOTAL 4,451.00 MEAN 12.2 MAX 66 MIN 0 AC-FT 8,830
WTR YR 1973 TOTAL 1,059.80 MEAN 2.90 MAX 16 MIN 0 AC-FT 2,100

14052500 QUINN RIVER NEAR LA PINE, OREG.

LOCATION.--Lat 43°47'03", long 121°50'06", in SW¼NW¼ sec.1, T.21 S., R.7 E., Deschutes County, Deschutes National Forest, on left bank at flow line of Crane Prairie Reservoir, 150 ft (46 m) downstream from springs at head of river, and 18 mi (29 km) northwest of La Pine.

PERIOD OF RECORD.--June 1922 to September 1925, October 1937 to current year. Published as "above Crane Prairie Reservoir near Lapine" 1922-25, and as "near Lapine" 1937-64. Monthly discharge only October 1937, published in WSP 1318.

GAGE.--Water-stage recorder and log control. Datum of gage is 4,442.1 ft (1,353.95 m) above mean sea level, based on elevation of Crane Prairie Reservoir when slack water reached station. June 1, 1922, to Sept. 30, 1925, nonrecording gage at site 150 ft (46 m) downstream at different datum.

AVERAGE DISCHARGE.--39 years, 24.3 ft^3/s (0.69 m^3/s), 17,610 acre-ft/yr (21.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 36 ft^3/s (1.02 m^3/s) Oct. 1-5; maximum gage height, 3.15 ft (0.960 m) Apr. 16, 17 (backwater from Crane Prairie Reservoir); minimum discharge, 11 ft^3/s (0.31 m^3/s) Sept. 25-30.

Period of record: Maximum discharge, 59 ft^3/s (1.67 m^3/s) July 4, 1949, gage height, 1.97 ft (0.600 m); maximum gage height, 3.92 ft (1.195 m) June 25, 1943 (backwater from Crane Prairie Reservoir); practically no flow Nov. 14, 1941.

REMARKS.--Records good. No regulation or diversion above station. Normal flow is entirely from springs 150 ft (46 m) upstream.

REVISIONS (WATER YEARS).--WSP 1448: 1939, 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	32	30	29	27	26	26	26	21	20	18	15
2	36	32	29	29	27	26	26	26	21	20	18	15
3	36	32	29	29	27	26	26	26	21	20	18	15
4	36	32	29	29	27	26	26	26	21	20	18	15
5	36	32	29	29	27	26	26	26	21	20	18	15
6	35	32	29	29	27	26	26	26	21	20	18	14
7	35	32	29	29	27	26	27	26	21	20	18	14
8	35	32	29	29	27	26	27	25	21	20	18	13
9	35	32	29	28	27	26	27	25	21	20	18	13
10	35	30	29	28	27	26	27	25	21	20	18	13
11	34	30	29	28	27	26	27	24	21	19	17	13
12	34	30	29	28	27	26	27	24	21	19	17	13
13	34	30	29	28	27	26	27	22	21	19	17	12
14	34	30	29	28	27	26	27	22	21	19	17	12
15	34	30	29	28	27	26	27	22	21	19	17	12
16	34	32	29	28	27	26	27	21	20	18	17	12
17	34	30	29	28	27	26	27	21	20	18	17	12
18	34	32	29	28	27	26	27	21	20	18	16	12
19	34	32	29	28	27	26	27	21	20	18	16	12
20	34	30	29	28	27	26	27	21	20	18	16	12
21	34	30	29	28	27	26	27	21	20	18	16	12
22	34	30	29	28	27	26	27	21	20	18	16	12
23	33	30	29	28	27	26	27	21	20	18	16	12
24	33	30	29	28	27	26	27	21	20	18	15	12
25	33	30	29	28	26	26	27	21	20	18	15	11
26	33	30	29	28	26	26	27	21	20	18	15	11
27	33	30	29	28	26	26	27	21	20	18	15	11
28	33	29	29	27	26	26	27	21	20	18	15	11
29	33	29	29	27	------	26	27	21	20	18	15	11
30	33	29	29	27	------	26	27	21	20	18	15	11
31	33	------	29	27	------	26	------	21	------	18	15	------
TOTAL	1,060	921	900	872	752	806	804	707	615	583	515	378
MEAN	34.2	30.7	29.0	28.1	26.9	26.0	26.8	22.8	20.5	18.8	16.6	12.6
MAX	36	32	30	29	27	26	27	26	21	20	18	15
MIN	33	29	29	27	26	26	26	21	20	18	15	11
AC-FT	2,100	1,830	1,790	1,730	1,490	1,600	1,590	1,400	1,220	1,160	1,020	750

CAL YR 1972 TOTAL 13,631 MEAN 37.2 MAX 52 MIN 27 AC-FT 27,040

WTR YR 1973 TOTAL 8,913 MEAN 24.4 MAX 36 MIN 11 AC-FT 17,680

14053000 CHARLTON CREEK ABOVE CRANE PRAIRIE RESERVOIR, NEAR LA PINE, OREG.

LOCATION.--Lat 43°46'51", long 121°50'06", in NE¼SW¼ sec.1, T.21 S., R.7 E., Deschutes County, in Deschutes National Forest, on left bank 3.0 mi (4.8 km) northwest of Crane Prairie Dam and 18.0 mi (29.0 km) northwest of La Pine.

DRAINAGE AREA.--15.6 mi² (40.4 km²), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--May and June 1923, October 1937 to September 1951, May to September 1952, May to September 1953, May 1954 to September 1955, May 1956 to October 1962, May 1963 to November 1964, April to December 1965, February to November 1966, March 1967 to December 1970, March 1971 to January 1972, March 1972 to current year. Monthly discharge only prior to October 1949, published in WSP 1318. Prior to Oct. 1, 1964, published as "near Lapine."

GAGE.--Water-stage recorder. Datum of gage is 4,458.70 ft (1,359.012 m) above mean sea level, May 1 to June 30, 1923, nonrecording gage at about same site at different datum.

AVERAGE DISCHARGE.--26 years (1937-51, 1954-55, 1956-62, 1963-64, 1967-70, 1972-73), 1.36 ft³/s (0.039 m³/s), 985 acre-ft/yr (1.21 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4.5 ft³/s (0.13 m³/s) May 18, 19, gage height, 0.91 ft (0.277 m); no flow most of year.

Period of record: Maximum discharge, 54 ft³/s (1.53 m³/s) June 12, 1950, gage height, 1.53 ft (0.466 m), from rating curve extended above 27 ft³/s (0.76 m³/s); maximum gage height, 2.39 ft (0.728 m) Mar. 9, 1957 (ice jam); no flow for many months each year.

Flood of December 1964 (discharge not determined) may have exceeded peak of record.

REMARKS.--Records fair. No regulation or diversion above station.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	1.3				
2							0	1.3				
3							0	1.6				
4							0	2.1				
5							0	1.8				
6							0	1.8				
7							0	1.8				
8							0	1.8				
9							0	1.8				
10							0	1.6				
11							0	1.6				
12							0	1.3				
13							0	1.8				
14							0	2.4				
15							0	2.9				
16							0	3.2				
17							0	3.7				
18							0	4.5				
19							0	4.0				
20							0	3.7				
21							0	2.9				
22							0	2.1				
23							0	1.8				
24							0	2.6				
25							.70	3.5				
26							2.1	1.8				
27							2.9	1.0				
28							2.6	.60				
29					------		2.1	.40				
30					------		1.6	.20				
31		------			------		------	.10	------			------
TOTAL	0	0	0	0	0	0	12.00	63.00	0	0	0	0
MEAN	0	0	0	0	0	0	.40	2.03	0	0	0	0
MAX	0	0	0	0	0	0	2.9	4.5	0	0	0	0
MIN	0	0	0	0	0	0	0	.10	0	0	0	0
AC-FT	0	0	0	0	0	0	24	125	0	0	0	0

CAL YR 1972 TOTAL 849.40 MEAN 2.32 MAX 22 MIN 0 AC-FT 1.680
WTR YR 1973 TOTAL 75.00 MEAN .21 MAX 4.5 MIN 0 AC-FT 149

14053500 CRANE PRAIRIE RESERVOIR NEAR LA PINE, OREG.

LOCATION.--Lat 43°45'20", long 121°47'00", in SW¼NW¼ sec.16, T.21 S., R.8 E., Deschutes County, in Deschutes National Forest, on control structure at Crane Prairie Dam on Deschutes River, 15 mi (24.1 km) northwest of La Pine, and at mile 238.3 (383.4 km).

DRAINAGE AREA.--254 mi^2 (658 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--November 1922 to November 1935, April to December 1936, April 1937 to current year. Prior to Oct. 1, 1964, published as "near Lapine."

GAGE.--Water-stage recorder. Datum of gage is 4,400.0 ft (1,341.120 m) above mean sea level (levels by Bureau of Reclamation); gage readings have been adjusted to elevations above mean sea level. Prior to July 13, 1940, nonrecording gage, at site 150 ft (45.7 m) upstream at same datum. July 13, 1940, to Sept. 15, 1966, nonrecording gage, at present site and datum.

EXTREMES.--Current year: Maximum contents, 56,440 acre-ft (69.6 hm^3) Apr. 17, elevation, 4,445.89 ft (1,355.107 m); minimum contents, 9,760 acre-ft (12.0 hm^3) Sept. 27, elevation, 4,435.88 ft (1,532.056 m).

Period of record: Maximum contents observed, 60,500 acre-ft (74.6 hm^3) June 5-7, 1943, elevation, 4,446.0 ft (1,355.14 m); no usable contents at times.

REMARKS.--Reservoir originally formed by earthfill dam completed in 1922, reconstructed as rock-faced, earthfill dam in 1940. Capacity, 55,340 acre-ft (68.2 hm^3) between elevation 4,424.0 ft (1,348.44 m) lip of fish-screen structure and 4,445.0 ft (1,354.84 m) crest of spillway. Some dead storage in isolated pools in reservoir at stages below 4,428 ft (1,349.7 m) and natural flow passing through reservoir when outlet gates are open prevents withdrawal of remaining storage to elevation of sill of gates. Crater Creek Canal diverts water to Tumalo Creek basin from tributaries of Soda Creek above station. Released water diverted from Deschutes River near Bend for irrigation near Bend and Redmond.

REVISIONS (WATER YEARS).--WSP 1218: Drainage area. WSP 1318: 1925, 1940-41, 1950. WSP 1448: 1925(M,m), 1940(m), 1950(m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	4,440.16	33,330	-
Oct. 31	4,440.47	34,630	+1,300
Nov. 30	4,442.65	44,180	+9,550
Dec. 31	4,444.16	51,240	+7,060
CAL YR 1972	-	-	+2,280
Jan. 31	4,444.55	53,140	+1,900
Feb. 28	4,444.74	54,060	+920
Mar. 31	4,445.12	55,930	+1,870
Apr. 30	4,444.34	52,110	-3,820
May 31	4,440.86	36,270	-15,840
June 30	4,437.01	21,050	-15,220
July 31	4,436.46	19,100	-1,950
Aug. 31	4,434.52	12,590	-6,510
Sept.30	4,433.62	9,840	-2,750
WTR YR 1973	-	-	-23,490

14054000 DESCHUTES RIVER BELOW CRANE PRAIRIE RESERVOIR, NEAR LA PINE, OREG.

LOCATION.--Lat 43°45'13", long 121°46'57", in SW¼NW¼ sec.16, T.21 S., R.8 E., Deschutes County, Descnutes National Forest, on left bank 0.1 mi (0.2 km) downstream from Crane Prairie Dam, 15 mi (24 km) northwest of La Pine, and at mile 238.2 (383.3 km).

DRAINAGE AREA.--254 mi^2 (658 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--August 1907 to November 1908 and August 1912 to September 1913 (fragmentary), October 1913 to September 1917, February 1922 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to October 1949, published as "at Crane Prairie, near Lapine." Published as "near Lapine" 1949-64.

GAGE.--Water-stage recorder. Datum of gage is 4,419.78 ft (1,347.149 m) above mean sea level (Pacific Power & Light Co. bench mark). Aug. 15, 1907, to Sept. 30, 1917, and Feb. 23 to June 8, 1922, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datums. June 9, 1922, to May 9, 1932, nonrecording gage or water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--55 years, 213 ft^3/s (6.032 m^3/s), 154,300 acre-ft/yr (190 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 489 ft^3/s (13.8 m^3/s) May 23, 24, June 1, 4, 5, gage height, 2.16 ft (0.658 m); minimum, 68 ft^3/s (1.93 m^3/s) Feb. 22 to Mar. 21.

Period of record: Maximum discharge, 1,170 ft^3/s (33.1 m^3/s) July 28, 1947, gage height, 3.34 ft (1.018 m); minimum, 1.0 ft^3/s (0.028 m^3/s) Oct. 10, Nov. 29, 1966.

REMARKS.--Records good. Flow regulated since 1922 by Crane Prairie Reservoir (see sta 14053500). No diversion above station.

REVISIONS (WATER YEARS).--WSP 1218: Drainage area. WSP 1318: 1929(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	459	130	135	142	138	68	71	310	480	191	155	208
2	459	130	135	142	138	68	71	310	484	191	155	208
3	459	130	135	142	140	68	71	310	484	191	158	208
4	459	130	135	142	140	68	71	310	489	191	158	205
5	459	130	135	142	140	68	71	310	489	191	158	205
6	459	130	135	142	140	68	71	310	484	191	155	205
7	459	130	135	142	140	68	71	310	484	191	155	205
8	455	130	135	142	140	68	71	310	480	191	238	208
9	438	130	135	142	140	68	71	306	480	191	286	208
10	430	130	135	140	140	68	73	306	476	191	278	208
11	426	130	135	140	142	68	73	310	476	185	275	208
12	426	130	138	140	142	68	73	314	480	182	275	211
13	426	130	140	140	118	68	75	314	484	182	278	214
14	395	130	140	140	77	68	77	314	480	179	275	214
15	376	130	140	140	77	68	77	364	476	179	272	214
16	372	130	140	140	77	68	77	395	472	179	268	214
17	368	130	140	140	77	68	143	395	467	168	282	214
18	368	130	140	138	77	68	230	391	459	158	286	211
19	368	130	142	138	77	68	226	391	455	158	286	211
20	368	130	142	138	77	68	226	391	451	158	286	211
21	364	130	142	138	77	68	226	391	451	158	286	211
22	364	130	142	138	72	70	223	438	368	158	286	211
23	368	132	142	138	68	70	223	480	314	158	282	211
24	276	132	142	138	68	70	242	489	314	158	282	211
25	205	135	142	138	68	70	275	484	310	158	286	211
26	202	135	142	138	68	70	275	484	230	158	286	211
27	202	135	142	138	68	70	286	480	188	158	286	187
28	202	135	142	138	68	70	317	480	188	158	236	150
29	202	135	142	138	------	70	314	480	188	155	211	150
30	202	135	142	138	------	70	314	476	191	155	211	150
31	179	------	142	138	------	71	------	476	------	155	211	------
TOTAL	11,195	3,934	4,309	4,330	2,894	2,129	4,684	11,829	12,272	5,367	7,542	6,093
MEAN	361	131	139	140	103	68.7	156	382	409	173	243	203
MAX	459	135	142	142	142	71	317	489	489	191	286	214
MIN	179	130	135	138	68	68	71	306	188	155	155	150
AC-FT	22,210	7,800	8,550	8,590	5,740	4,220	9,290	23,460	24,340	10,650	14,960	12,090

CAL YR 1972 TOTAL 117,720 MEAN 322 MAX 672 MIN 55 AC-FT 233,500
WTR YR 1973 TOTAL 76,578 MEAN 210 MAX 489 MIN 68 AC-FT 151,900

14054500 BROWN CREEK NEAR LA PINE, OREG.

LOCATION.--Lat 43°42'57", long 121°48'10", in NE¼SW¼ sec.29, T.21 S., R.8 E., Deschutes County, in Deschutes National Forest, on right bank at highway crossing and 15 mi (24 km) northwest of La Pine.

DRAINAGE AREA.--21 mi² (54 km²), approximately, hydrologic drainage boundary owing to ground-water exchange.

PERIOD OF RECORD.--May 1922 to September 1925, July 1938 to current year. Monthly discharge only July 1938 to September 1949, published in WSP 1318. Prior to Oct. 1, 1964, published as "near Lapine."

GAGE.--Water-stage recorder. Altitude of gage is 4,370 ft (1,332 m), from topographic map. May 24, 1922, to Sept. 30, 1925, nonreccording gage, and July, 1938, to Nov. 1, 1945, water-stage recorder, at site 0.4 mi (0.6 km) downstream at different datums. Nov. 2, 1945, to Aug. 25, 1971, water-stage recorder at site 0.8 mi (1.3 km) upstream at datum 4,372.94 ft (1,332.872 m) above mean sea level.

AVERAGE DISCHARGE.--38 years, 39.1 ft³/s (1.107 m³/s), 28,330 acre-ft/yr (34.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 67 ft³/s (1.90 m³/s) Oct. 13, gage height, 1.03 ft (0.314 m); minimum, 30 ft³/s (0.850 m³/s) Sept. 2-30.

Period of record: Maximum discharge, 104 ft³/s (2.95 m³/s) Aug. 4, 1956, gage height, 1.64 ft (0.500 m); maximum gage height, 2.10 ft (0.640 m) Aug. 12-24, Sept. 8-15, 1965; minimum discharge, 16 ft³/s (0.453 m³/s) July 22-25, 1941, and at times December 1941 to March 1942.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1448: 1922-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	61	55	52	46	44	40	37	33	31	31	31
2	65	61	55	51	45	43	40	37	33	31	31	30
3	64	61	55	51	45	43	40	37	33	31	31	30
4	64	61	54	51	45	43	40	37	33	31	31	30
5	64	60	54	50	45	43	42	37	33	31	31	30
6	64	60	54	49	45	42	41	36	33	31	31	30
7	64	60	54	49	45	42	40	36	33	31	31	30
8	64	59	53	49	45	42	40	36	33	31	31	30
9	64	60	53	49	45	42	40	36	33	31	31	30
10	64	60	52	49	45	43	40	36	33	31	31	30
11	66	59	52	49	44	42	40	36	32	31	31	30
12	64	58	53	50	44	42	41	35	32	31	31	30
13	66	59	53	51	44	42	42	35	32	31	31	30
14	64	58	54	49	44	42	40	35	32	31	31	30
15	63	58	55	49	44	42	40	35	32	31	31	30
16	63	58	56	49	44	42	40	34	32	31	31	30
17	63	58	57	49	44	42	40	34	32	31	31	30
18	63	58	58	48	44	41	40	34	31	31	31	30
19	62	58	59	48	43	41	40	34	31	31	31	30
20	62	57	60	48	43	41	39	34	31	31	31	30
21	62	57	61	48	43	41	39	34	31	31	31	30
22	62	57	60	47	43	41	39	34	31	31	31	30
23	61	57	59	47	43	41	38	34	31	31	31	30
24	61	56	58	47	43	41	38	34	32	31	31	30
25	61	57	57	46	43	42	38	34	32	31	31	30
26	61	57	56	46	44	42	37	34	32	31	31	30
27	61	56	55	46	44	41	37	34	32	31	31	30
28	61	56	54	46	43	41	37	34	31	31	31	30
29	61	55	53	46	------	40	37	33	31	31	31	30
30	60	55	52	46	------	41	37	33	31	31	31	30
31	60	------	52	46	------	40	------	33	------	31	31	------
TOTAL	1,949	1,747	1,713	1,501	1,235	1,295	1,182	1,082	961	961	961	901
MEAN	62.9	58.2	55.3	48.4	44.1	41.8	39.4	34.9	32.0	31.0	31.0	30.0
MAX	66	61	61	52	46	44	42	37	33	31	31	31
MIN	60	55	52	46	43	40	37	33	31	31	31	30
AC-FT	3,870	3,470	3,400	2,980	2,450	2,570	2,340	2,150	1,910	1,910	1,910	1,790

CAL YR 1972 TOTAL 20,771 MEAN 56.8 MAX 69 MIN 42 AC-FT 41,200
WTR YR 1973 TOTAL 15,488 MEAN 42.4 MAX 66 MIN 30 AC-FT 30,720

14055500 ODELL CREEK NEAR CRESCENT, OREG.

LOCATION.--Lat 43°32'51", long 121°57'41", in SW¼SW¼ sec.25, T.23 S., R.6 E., Klamath County, on left bank 1,000 ft (305 m) downstream from Odell Lake, 3 mi (4.8 km) north of town of Crescent Lake, and 14 mi (23 km) northwest of Crescent.

DRAINAGE AREA.--39.0 mi² (101.0 km²).

PERIOD OF RECORD.--August, September 1911, August, September 1912, January, February, May to November 1913, April to August 1914, December 1923 to June 1924, May 1933 to current year. Gage heights and discharge measurements only August, September 1911, January 1913. Published as Odell Lake outlet near Crescent 1911-12. Records for January to July 1912, published in WSP 332, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,799.05 ft (1,462.750 m) above mean sea level. Prior to June 7, 1924, nonrecording gage at several sites within 700 ft (213 m) of present site at various datums.

AVERAGE DISCHARGE.--40 years (1933-73), 81.3 ft³/s (2.302 m³/s), 28.31 in/yr (719 mm/yr), 58,900 acre-ft/yr (72.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 268 ft³/s (7.59 m³/s) occurred sometime during period Dec. 20 to Jan. 31, gage height, 1.17 ft (0.357 m); minimum, 14 ft³/s (0.40 m³/s) Aug. 24.

Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) Dec. 25, 1964, gage height, 2.60 ft (0.792 m), from rating curve extended above 250 ft³/s (7.08 m³/s); minimum, 9 ft³/s (0.25 m³/s) sometime during period Sept. 7-30, 1934.

REMARKS.--Records good except those for winter months, which are fair. Flow affected occasionally in winter by ice jams at outlet of Odell Lake, and slightly affected at times by seiches in Odell Lake. No diversion above station.

REVISIONS (WATER YEARS).--WSP 754: Drainage area. WSP 794: 1933-34. WSP 1442: 1924, 1934(M). See also PERIOD OF RECORD

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	78	76	120	84	68	75	70	99	29	29	16
2	59	78	77	110	81	68	73	73	93	29	28	15
3	59	81	77	108	78	68	73	75	87	30	28	16
4	57	83	78	102	78	68	70	84	84	31	27	16
5	54	84	76	97	75	66	68	81	81	31	25	17
6	52	82	78	94	73	68	66	81	78	30	24	17
7	50	82	82	90	73	66	61	81	75	30	23	19
8	52	82	83	88	73	66	64	78	75	29	22	17
9	54	81	79	85	70	64	64	75	75	29	22	17
10	57	79	77	85	70	73	64	75	70	31	21	18
11	68	77	76	89	70	81	64	75	68	31	21	19
12	68	76	77	96	68	81	66	75	66	29	21	19
13	80	77	78	112	68	87	70	78	66	29	20	20
14	78	77	77	110	66	84	73	81	64	33	20	19
15	73	77	76	110	66	81	70	93	59	35	20	18
16	68	75	78	120	64	78	73	102	61	37	19	18
17	64	74	88	118	66	81	81	112	66	35	18	18
18	64	74	100	116	66	78	90	119	64	35	17	18
19	66	74	120	110	66	78	102	126	64	37	17	19
20	61	74	140	105	64	75	90	122	61	38	17	21
21	64	74	165	100	61	75	90	116	59	38	17	22
22	61	74	190	97	61	73	90	112	59	35	16	25
23	61	74	190	95	59	73	87	108	59	33	16	31
24	61	75	190	92	57	70	81	122	57	31	14	35
25	64	77	175	90	59	68	78	133	57	31	15	40
26	64	87	160	88	59	66	78	130	57	31	16	37
27	66	82	150	86	61	61	78	122	44	31	16	35
28	73	78	145	84	61	64	73	112	31	30	16	35
29	73	77	135	81	------	66	73	105	31	29	17	35
30	73	75	125	80	------	68	70	105	30	30	17	35
31	74	------	122	90	------	73	------	102	------	29	18	------
TOTAL	1,977	2,338	3,440	3,048	1,897	2,236	2,255	3,023	1,940	986	617	687
MEAN	63.8	77.9	111	98.3	67.8	72.1	75.2	97.5	64.7	31.8	19.9	22.9
MAX	80	87	190	120	84	87	102	133	99	38	29	40
MIN	50	74	76	80	57	61	61	70	30	29	14	15
AC-FT	3,920	4,640	6,820	6,050	3,760	4,440	4,470	6,000	3,850	1,960	1,220	1,360

CAL YR 1972 TOTAL 38,978 MEAN 106 MAX 252 MIN 50 AC-FT 77,310
WTR YR 1973 TOTAL 24,444 MEAN 67.0 MAX 190 MIN 14 AC-FT 48,480

NOTE.--No gage-height record Nov. 4-29, Dec. 1-19, Dec. 21 to Jan. 30.

14056000 WICKIUP RESERVOIR NEAR LA PINE, OREG.

LOCATION.--Lat 43°41'02", long 121°41'20", in SW¼NE¼ sec.7, T.22 S., R.9 E., Deschutes County, in Deschutes National Forest, in gate-chamber structure at Wickiup Dam on Deschutes River, 9.0 mi (14.5 km) west of La Pine, and at mile 226.8 (364.9 km).

DRAINAGE AREA.--482 mi^2 (1,250 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--December 1942 to current year. Prior to Oct. 1, 1964, published as "near Lapine."

GAGE.--None recording gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Jan. 15, 1945, nonrecording gages at nearby sites at same datum.

EXTREMES.--Current year: Maximum contents observed, 200,400 acre-ft (247 hm^3) Mar. 25-27, elevation, 4,337.69 ft (1,322.128 m); minimum observed, 27,460 acre-ft (33.9 hm^3) Sept. 21, elevation, 4,299.39 ft (1,310.454 m).

Period of record: Maximum contents observed, 202,800 acre-ft (250 hm^3) Apr. 2, 1965, elevation, 4,337.91 ft (1,322.193 m); minimum observed since reservoir first filled in March 1949, 534 acre-ft (0.66 hm^3), revised on basis of computer expanded capacity table dated June 1970, Oct. 18, 1952, elevation, 4,270.86 ft (1,301.758 m).

REMARKS.--Reservoir is formed by rock-faced, earthfill dam completed in 1949. Some storage began in December 1942, capacity, 182,100 acre-ft (225 hm^3) between elevations 4,265.0 ft (1,299.97 m), no storage, and 4,336.0 ft (1,321.61 m) crest of spillway, with earth plug to elevation 4,339.0 ft (1,322.53 m). Crater Creek Canal diverts water above station to Tumalo Creek basin. Released water is diverted from Deschutes River at Bend for irrigation near Madras.

COOPERATION.--Daily elevations furnished by North Unit Irrigation District, and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	4,330.04	128,300	-
Oct. 31	4,331.89	143,200	+14,900
Nov. 30	4,333.57	158,200	+15,000
Dec. 31	4,335.56	177,600	+19,400
CAL YR 1972	-	-	-3,300
Jan. 31	4,336.31	185,400	+7,800
Feb. 28	4,336.47	187,100	+1,700
Mar. 31	4,337.68	200,300	+13,200
Apr. 30	4,336.17	183,900	-16,400
May 31	4,332.28	146,600	-37,300
June 30	4,326.92	107,200	-39,400
July 31	4,313.59	57,500	-49,700
Aug. 31	4,302.68	33,400	-24,100
Sept.30	4,300.99	30,240	-3,160
WTR YR 1973	-	-	-98,060

14056500 DESCHUTES RIVER BELOW WICKIUP RESERVOIR, NEAR LA PINE, OREG.

LOCATION.--Lat 43°41'10", long 121°41'13", in NW¼NE¼ sec.7, T.22 S., R.9 E., Deschutes County, on left bank 1,000 ft (305 m) downstream from Wickiup Dam, 9 mi (14 km) west of La Pine, and at mile 226.4 (364.3 km).

DRAINAGE AREA.--483 mi^2 (1,251 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--June 1938 to current year. Monthly discharge only June 1938, published in WSP 1318. Published as "near Lapine" 1938-64.

GAGE.--Water-stage recorder. Datum of gage is 4,257.41 ft (1,297.659 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--35 years, 749 ft^3/s (21.2 m^3/s), 542,700 acre-ft/yr (669 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,030 ft^3/s (57.5 m^3/s) June 5, gage height, 7.43 ft (2.265 m); minimum, 51 ft^3/s (1.44 m^3/s) Nov. 15.

Period of record: Maximum discharge, 2,280 ft^3/s (64.6 m^3/s) July 28 to Aug. 1, 1956, July 31, Aug. 1, 2, 1962; minimum, 5 ft^3/s (0.14 m^3/s) Nov. 21, 1962, when gate was closed for outlet inspection and repair, minimum daily, 10 ft^3/s (0.283 m^3/s) Jan. 17, 1952.

REMARKS.--Records good. Flow regulated by Crane Prairie Reservoir (see station 14053500), and since 1942 by Wickiup Reservoir (see station 14056500). Some leakage from Crane Prairie and Wickiup Reservoirs does not pass station. Some spill bypassed station in 1955. Crater Creek canal diverts water above station to Tumalo Creek basin.

REVISIONS (WATER YEARS).--WSP 1448: 1944(m), 1947-51(m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,130	626	470	533	749	252	570	1,320	1,720	1,830	1,630	1,160
2	1,130	626	470	533	746	260	570	1,370	1,830	1,810	1,610	1,160
3	1,130	626	470	533	746	260	570	1,470	1,870	1,830	1,600	1,150
4	1,110	626	470	530	746	258	560	1,400	1,890	1,800	1,590	1,150
5	1,090	626	470	530	746	258	539	1,330	1,990	1,780	1,580	1,160
6	1,040	626	467	530	749	258	574	1,240	2,020	1,710	1,590	1,160
7	996	626	467	530	718	258	690	908	1,980	1,630	1,590	1,170
8	996	626	467	530	672	258	690	1,130	1,920	1,640	1,580	1,230
9	1,010	600	467	527	651	255	775	1,200	1,880	1,780	1,590	1,260
10	1,020	634	467	527	651	255	895	1,200	1,820	1,840	1,550	1,230
11	1,020	634	467	527	654	252	1,000	1,270	1,610	1,840	1,520	1,180
12	1,020	634	464	527	637	252	1,060	1,370	1,590	1,850	1,480	1,200
13	1,020	634	464	527	620	252	1,060	1,380	1,600	1,860	1,420	1,140
14	864	539	464	527	616	252	1,060	1,540	1,600	1,850	1,410	875
15	742	358	464	524	588	252	1,060	1,730	1,600	1,840	1,360	878
16	742	464	467	524	564	255	1,060	1,740	1,540	1,840	1,330	878
17	658	464	470	626	564	258	1,060	1,800	1,470	1,830	1,320	956
18	623	464	470	749	564	255	861	1,890	1,470	1,830	1,320	1,010
19	623	464	470	749	564	255	858	1,890	1,460	1,830	1,310	1,010
20	623	464	470	749	564	255	858	1,950	1,480	1,800	1,310	1,010
21	623	464	512	749	564	255	864	1,960	1,540	1,770	1,310	988
22	626	464	539	749	564	408	903	1,940	1,510	1,760	1,320	875
23	626	464	533	749	542	592	984	1,900	1,520	1,750	1,320	850
24	626	464	533	749	533	592	1,150	1,800	1,520	1,740	1,270	780
25	626	464	533	749	533	588	1,280	1,530	1,560	1,720	1,250	732
26	626	464	533	749	533	584	1,280	1,520	1,570	1,670	1,300	732
27	626	464	533	746	432	581	1,280	1,520	1,580	1,640	1,270	704
28	626	467	533	746	285	574	1,280	1,520	1,630	1,630	1,250	662
29	626	467	533	742	------	574	1,280	1,570	1,740	1,630	1,230	609
30	626	467	533	749	------	574	1,280	1,700	1,830	1,630	1,140	545
31	626	------	533	749	------	570	------	1,720	------	1,630	1,150	------
TOTAL	25,470	16,010	15,203	19,558	17,095	11,002	27,951	47,808	50,340	54,590	43,500	29,444
MEAN	822	534	490	631	611	355	932	1,542	1,678	1,761	1,403	981
MAX	1,130	634	539	749	749	592	1,280	1,960	2,020	1,860	1,630	1,260
MIN	623	358	464	524	285	252	539	908	1,460	1,630	1,140	545
AC-FT	50,520	31,760	30,160	38,790	33,910	21,820	55,440	94,830	99,850	108,300	86,280	58,400

CAL YR 1972 TOTAL 339,935 MEAN 929 MAX 1,680 MIN 358 AC-FT 674,300
WTR YR 1973 TOTAL 357,971 MEAN 981 MAX 2,020 MIN 252 AC-FT 710,000

14057500 FALL RIVER NEAR LA PINE, OREG.

LOCATION.--Lat 43°47'48", long 121°34'18", in NW¼SE¼ sec.31, T.20 S., R.10 E., Deschutes County, on left bank 50 ft (15 m) downstream from pond spillway at State fish hatchery, 9 mi (14 km) northeast of La Pine, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--45.1 mi^2 (116.8 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--July 1938 to current year. Records for May to September 1912 at site 3 mi (4.8 km) downstream not equivalent owing to difference in drainage area. Prior to Oct. 1, 1964, published as "near Lapine."

GAGE.--Water-stage recorder. Altitude of gage is 4,220 ft (1,286 m), by barometer.

AVERAGE DISCHARGE.--35 years, 152 ft^3/s (4.305 m^3/s), 110,100 acre-ft/yr (136 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 226 ft^3/s (6.40 m^3/s) Feb. 26, gage height, 1.81 ft (0.552 m); minimum, 153 ft^3/s (4.33 m^3/s) Sept. 12, 15-17.

Period of record: Maximum discharge, 254 ft^3/s (7.19 m^3/s) June 5, 1965, gage height, 20.2 ft (0.616 m); minimum, 67 ft^3/s (1.90 m^3/s) sometime during period Sept. 20-30, 1969.

REMARKS.--Records good. Diversion only to ponds at fish hatchery 50 ft (15 m) above station, from which water returns to river above station. Stream is spring fed and momentary extremes are caused by operation of fish hatchery.

REVISIONS (WATER YEARS).--WSP 984: 1938-42(M,m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	180	175	172	171	174	175	175	172	169	164	159
2	186	180	175	172	171	175	175	175	172	169	164	159
3	186	180	175	172	172	175	175	175	172	169	164	159
4	186	180	174	172	172	175	175	177	172	169	164	159
5	186	179	174	172	172	175	175	175	172	169	164	158
6	186	179	174	172	172	175	175	175	172	169	163	158
7	184	179	174	172	172	175	175	175	172	169	163	158
8	184	179	174	172	172	175	177	175	172	169	163	156
9	184	179	174	172	172	175	177	175	172	169	163	156
10	184	179	174	172	172	177	177	174	172	169	163	156
11	186	179	174	172	172	177	177	175	172	169	163	155
12	184	179	174	172	174	177	177	175	172	167	163	155
13	184	179	174	172	174	177	177	175	172	171	161	155
14	182	179	174	172	174	177	175	174	172	169	161	155
15	182	179	174	172	174	177	175	174	172	167	161	155
16	182	179	174	172	174	177	175	174	172	167	161	155
17	182	179	175	172	174	177	175	174	171	167	161	155
18	182	177	175	172	174	177	175	174	171	167	161	158
19	182	177	177	172	172	177	175	174	171	167	161	158
20	182	177	175	172	172	177	175	174	171	166	161	158
21	182	177	177	171	174	177	175	174	171	166	161	158
22	182	175	177	171	174	177	175	174	171	166	161	158
23	182	175	175	171	174	177	175	174	169	166	161	158
24	180	175	175	171	174	177	175	174	169	164	161	158
25	180	175	174	171	174	177	175	172	169	164	161	156
26	180	175	174	171	174	177	175	172	169	164	161	156
27	180	175	174	171	174	177	175	172	169	164	161	156
28	180	174	174	171	174	177	175	172	169	164	161	155
29	180	174	172	171	------	177	175	172	169	164	161	155
30	180	174	172	171	------	177	175	172	169	164	161	155
31	180	------	172	171	------	177	------	172	------	164	161	------
TOTAL	5,666	5,327	5,405	5,321	4,844	5,468	5,260	5,394	5,130	5,177	5,020	4,706
MEAN	183	178	174	172	173	176	175	174	171	167	162	157
MAX	186	180	177	172	174	177	177	177	172	171	164	159
MIN	180	174	172	171	171	174	175	172	169	164	161	155
AC-FT	11,240	10,570	10,720	10,550	9,610	10,850	10,430	10,700	10,180	10,270	9,960	9,330

CAL YR 1972 TOTAL 64,515 MEAN 176 MAX 187 MIN 151 AC-FT 128,000
WTR YR 1973 TOTAL 62,716 MEAN 172 MAX 186 MIN 155 AC-FT 124,400

14059500 CRESCENT LAKE NEAR CRESCENT, OREG.

LOCATION.--Lat 43°30'05", long 121°58'20", in SW¼ sec.11, T.24 S., R.6 E., Klamath County, Deschutes National Forest, on outlet works at dam on Crescent Creek, 0.8 mi (1.3 km) south of town of Crescent Lake, 14 mi (22.5 km) west of Crescent, and at mile 30.0 (48.3 km).

DRAINAGE AREA.--60.7 mi^2 (157 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--August 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Oct. 1, 1956, nonrecording gage at nearby site at datum 4,825.16 ft (1,470.709 m), above mean sea level. Oct. 1, 1956, to Sept. 12, 1966, nonrecording gage, at present site and datum.

EXTREMES.--Current year: Maximum contents, 90,700 acre-ft (112 hm^3) May 24-26, elevation, 4,846.50 ft (1,477.213 m); minimum, 52,580 acre-ft (64.8 hm^3) Sept. 6, elevation, 4,836.61 ft (1,474.199 m).

Period of record: Maximum contents observed, 92,040 acre-ft (113 hm^3) June 29, 1972, elevation, 4,846.84 ft (1,477.317 m); minimum observed, 9,640 acre-ft (11.9 hm^3) Oct. 21, 1931, elevation, 4,827.91 ft (1,471.547 m).

REMARKS.--Reservoir originally formed by dam of earth and logs completed in 1922, reconstructed as earthfill dam in 1956. Capacity, 117,200 acre-ft (145 hm^3) between elevations 4,821.5 ft (1,469.59 m), sill of outlet gate and 4,853.0 ft (1,479.19 m), crest of spillway. Maximum allowable storage, 86,050 acre-ft (106 hm^3) elevation, 4,845.32 ft (1,476.854 m). Dead storage about 500,000 acre-ft (616 hm^3) Oregon Game Commission survey. Records given herein represent usable contents. Water surface probably cannot be lowered below elevation 4,823.4 ft (1,470.17 m) owing to natural flow through reservoir. Released water is diverted from Deschutes River at Bend for irrigation near Tumalo.

REVISIONS (WATER YEARS).--WSP 1218: Drainage area. WSP 1318: 1922-31. WSP 1448: 1923-31(M,m).

MONTHEND ELEVATION AND USABLE CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	4,840.23	66,340	–
Oct. 31	4,840.77	68,400	+2,060
Nov. 30	4,840.95	69,100	+700
Dec. 31	–	a76,690	+7,590
CAL YR 1972	–	–	+11,660
Jan. 31	4,844.22	81,770	+5,080
Feb. 28	4,845.16	85,430	+3,660
Mar. 31	4,845.76	87,780	+2,350
Apr. 30	4,846.28	89,820	+2,040
May 31	4,846.41	90,340	+520
June 30	4,844.12	81,380	-8,960
July 31	4,840.42	67,070	-14,310
Aug. 31	4,836.94	53,820	-13,250
Sept. 30	4,837.24	54,940	+1,120
WTR YR 1973	–	–	-11,400

a Interpolated.

14060000 CRESCENT CREEK AT CRESCENT LAKE, NEAR CRESCENT, OREG.

LOCATION.--Lat 43°30'11", long 121°58'20", in SE¼SW¼ sec.11, T.24 S., R.6 E., Klamath County, Deschutes National Forest, on left bank 400 ft (122 m) downstream from Crescent Lake Dam, 0.5 mi (0.8 km) south of town of Crescent Lake, 14 mi (23 km) west of Crescent, and at mile 29.9 (48.1 km).

DRAINAGE AREA.--60.7 mi² (157.2 km²), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--January to September 1911 (gage heights and discharge measurements only), January 1912 to July 1915, July to September 1927, May 1928 to current year. Published as Crescent Lake outlet near Crescent January 1911 to September 1912, and as Crescent Creek at outlet of Crescent Lake, near Crescent October 1913 to July 1915.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 4,819.96 ft (1,469.124 m) above mean sea level. See WSP 1935 for history of changes prior to Sept. 11, 1956.

AVERAGE DISCHARGE.--47 years (1912-14, 1928-73), 57.1 ft³/s (1.617 m³/s), 41,370 acre-ft/yr (51.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 271 ft³/s (7.67 m³/s) Aug. 14, 15, gage height, 2.95 ft (0.899 m); minimum, 0.80 ft³/s (0.023 m³/s) Sept. 29, 30.
Period of record: Maximum discharge, 313 ft³/s (8.86 m³/s) July 9, 1929, Aug. 9, 1936; no flow at times.

REMARKS.--Records good. Flow regulated since 1922 by Crescent Lake (see station 14059500). No diversion above station.

REVISIONS.--WSP 1218: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.5	2.8	2.2	2.5	3.0	3.0	33	82	244	262	143
2	1.2	3.8	2.9	2.2	2.8	3.0	3.0	33	82	244	262	141
3	1.2	4.0	2.8	2.2	2.8	3.0	3.0	33	82	244	260	141
4	1.2	4.0	2.9	2.2	2.8	3.2	3.0	33	82	243	259	141
5	1.2	3.8	2.5	2.2	2.8	3.2	3.0	33	83	243	258	140
6	1.0	3.2	2.2	2.2	2.8	3.2	3.0	33	84	242	258	59
7	1.0	62	2.2	2.5	2.8	3.2	3.0	33	128	242	256	1.4
8	1.0	119	2.2	2.5	2.8	3.2	3.0	33	169	240	254	1.2
9	1.0	118	2.2	2.5	3.0	3.2	3.0	33	169	240	253	1.2
10	1.0	118	2.2	2.5	3.0	3.2	3.0	47	168	239	252	1.2
11	1.0	118	2.2	2.5	3.0	3.2	3.0	81	168	239	250	1.2
12	36	118	2.2	2.5	3.0	3.2	3.0	81	168	237	249	1.2
13	122	118	2.2	2.5	3.0	3.2	3.2	81	167	236	247	1.2
14	122	118	2.2	2.5	3.0	3.2	3.2	81	167	236	258	1.2
15	122	116	2.2	2.5	3.0	3.2	3.2	81	167	235	270	1.2
16	122	116	2.2	2.5	3.0	3.2	3.2	81	167	233	268	1.2
17	122	116	2.2	2.5	3.0	3.2	3.2	81	165	237	265	1.2
18	122	116	2.2	2.5	3.0	3.2	3.2	81	165	242	264	1.2
19	122	116	2.2	2.5	3.0	3.0	3.2	81	191	240	262	1.2
20	122	116	2.2	2.5	3.0	3.0	3.2	81	223	239	260	1.2
21	122	107	2.2	2.5	3.0	3.0	3.2	82	223	237	259	1.2
22	122	99	2.2	2.5	3.0	3.0	3.0	82	222	236	258	1.2
23	121	99	2.2	2.5	3.0	3.0	3.0	82	222	236	212	1.2
24	120	99	2.2	2.5	3.0	3.0	3.0	82	222	235	145	1.2
25	120	99	2.2	2.5	3.0	3.0	3.0	82	221	235	145	1.2
26	120	99	2.2	2.5	3.0	3.0	3.0	82	221	235	145	1.0
27	46	51	2.2	2.5	3.0	3.0	20	82	219	235	145	1.0
28	1.2	3.2	2.2	2.5	3.0	3.0	33	82	219	233	144	1.0
29	1.2	3.2	2.2	2.5	------	3.0	33	82	230	233	144	1.0
30	1.0	3.0	2.2	2.5	------	3.0	33	82	246	232	144	.80
31	2.8	------	2.2	2.5	------	3.0	------	82	------	246	143	------
TOTAL	1,801.4	2,270.7	70.9	75.7	82.1	96.0	198.8	2,056	5,122	7,388	7,051	792.80
MEAN	58.1	75.7	2.29	2.44	2.93	3.10	6.63	66.3	171	238	227	26.4
MAX	122	119	2.8	2.5	3.0	3.2	33	82	246	246	270	143
MIN	1.0	3.0	2.2	2.2	2.5	3.0	3.0	33	82	232	143	.80
AC-FT	3,570	4,500	141	150	163	190	394	4,080	10,160	14,650	13,990	1,570

CAL YR 1972 TOTAL 37,125.60 MEAN 101 MAX 280 MIN .60 AC-FT 73,640
WTR YR 1973 TOTAL 27,005.40 MEAN 74.0 MAX 270 MIN .80 AC-FT 53,570

14063000 LITTLE DESCHUTES RIVER NEAR LA PINE, OREG.

LOCATION.--Lat 43°41'21", long 121°30'06", in SW¼SW¼ sec.2, T.22 S., R.10 E., Deschutes County, on right bank 10 ft (3 m) downstream from highway bridge at former town of Rosland, 1.1 mi (1.8 km) north of La Pine, and at mile 26.8 (43.1 km).

DRAINAGE AREA.--859 mi^2 (2,225 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--September 1910 to January 1911, March, April, August 1911, March to September 1912, June to October 1913, June to November 1918, August to October 1920, May 1924 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as Deschutes River near Lapine 1910-12, as East Fork Deschutes River near Lapine 1913-20, and as Little Deschutes River near Lapine 1924-64.

GAGE.--Water-stage recorder. Datum of gage is 4,192.81 ft (1,277.968 m) above mean sea level. Sept. 1, 1910, to Aug. 31, 1911, nonrecording gage at present site at different datum. Mar. 1 to Sept. 30, 1912, nonrecording gage at site 1.2 mi (1.9 km) downstream at different datum. June 1, 1913, to Sept. 28, 1928, nonrecording gage and Sept. 29, 1928, to Sept. 30, 1931, water-stage recorder at present site at different datums.

AVERAGE DISCHARGE.--49 years (1924-73), 204 ft^3/s (5.78 m^3/s), 147,800 acre-ft per year (182 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 465 ft^3/s (13.2 m^3/s) Dec. 25; maximum gage height, 6.33 ft (1.929 m) Dec. 25, backwater from ice; minimum discharge, 23 ft^3/s (0.65 m^3/s) Sept. 17.

Period of record: Maximum discharge, 3,660 ft^3/s (104 m^3/s Dec. 25, 1964, gage height, 8.18 ft (2.493 m); minimum, 8 ft^3/s (0.227 m^3/s) Sept. 2, 3, 1931.

REMARKS.--Records good. Flow regulated since 1922 by Crescent Lake (see station 14063000). Many diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1218: 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	86	107	169	130	149	124	156	180	277	242	173
2	89	107	96	163	130	161	118	152	174	263	256	173
3	84	114	93	152	120	152	115	146	170	277	265	171
4	80	121	93	149	125	141	114	150	164	304	270	170
5	80	135	73	142	130	131	120	162	159	282	272	169
6	77	135	65	135	140	126	130	159	153	268	272	169
7	76	118	62	124	140	128	140	148	149	265	270	168
8	74	111	56	110	140	123	138	146	148	244	269	93
9	75	189	52	110	130	124	134	144	196	238	269	67
10	77	218	52	114	120	131	141	142	209	237	270	46
11	89	228	56	129	130	140	146	147	221	235	269	40
12	112	228	62	153	125	147	143	163	208	239	268	35
13	132	226	72	207	125	135	159	177	208	239	264	32
14	202	226	70	281	120	123	174	177	213	242	260	29
15	247	226	68	327	115	116	166	183	211	243	257	25
16	254	225	90	356	115	112	161	206	212	243	265	24
17	250	225	120	355	115	117	163	221	216	242	274	23
18	242	225	148	297	115	120	169	233	221	240	276	24
19	237	224	216	243	115	117	176	233	225	254	274	25
20	230	225	303	204	115	118	174	235	220	266	273	28
21	224	222	360	160	115	121	171	234	251	270	273	32
22	225	218	410	140	114	120	162	228	264	265	270	39
23	225	201	446	125	117	116	159	218	265	263	269	41
24	218	194	460	120	119	116	157	217	266	259	270	44
25	216	191	465	130	123	120	154	233	264	255	222	49
26	216	204	430	140	129	126	150	240	263	254	194	54
27	213	225	391	130	135	137	151	228	260	252	189	55
28	205	225	276	120	137	132	151	211	256	250	184	52
29	118	147	230	120	------	122	161	197	254	247	182	46
30	97	119	197	130	------	119	156	183	256	246	178	43
31	83	------	202	135	------	121	------	180	------	242	177	------
TOTAL	4,852	5,538	5,821	5,370	3,484	3,961	4,477	5,849	6,456	7,901	7,743	2,139
MEAN	157	185	188	173	124	128	149	189	215	255	250	71.3
MAX	254	228	465	356	140	161	176	240	266	304	276	173
MIN	74	86	52	110	114	112	114	142	148	235	177	23
AC-FT	9,620	10,980	11,550	10,650	6,910	7,860	8,880	11,600	12,810	15,670	15,360	4,240

CAL YR 1972 TOTAL 127,738 MEAN 349 MAX 781 MIN 52 AC-FT 253,400
WTR YR 1973 TOTAL 63,591 MEAN 174 MAX 465 MIN 23 AC-FT 126,100

14064500 DESCHUTES RIVER AT BENHAM FALLS, NEAR BEND, OREG.

LOCATION.--Lat 43°55'49", long 121°24'39", in SW¼NE¼ sec.16, T.19 S., R.11 E., Deschutes County, Deschutes National Forest, on right bank 0.5 mi (0.8 km) upstream from Benham Falls, 10 mi (16 km) southwest of Bend, and at mile 181.4 (291.9 km).

DRAINAGE AREA.--1,759 mi^2 (4,556 km^2).

PERIOD OF RECORD.--April 1906 to September 1913, April to September 1914, August to December 1920, April to September 1921, February 1924 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "at West's ranch, near Lava" April 1906 to February 1909, April to September 1914. Records for January 1905 to March 1906 and October 1913 to September 1914, published under present name in WSP 370 and 394, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,142.10 ft (1,262.512 m) above mean sea level (Bureau of Reclamation bench mark). See WSP 1738 for history of changes prior to Nov. 20, 1958.

AVERAGE DISCHARGE.--56 years (1906-13, 1924-73), 1,412 ft^3/s (39.99 m^3/s), 1,023,000 acre-ft/yr (1.26 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,690 ft^3/s (76.2 m^3/s) June 8, gage height, 6.31 ft (1.923 m); minimum, 808 ft^3/s (22.9 m^3/s) Jan. 9.

Period of record: Maximum discharge, 5,000 ft^3/s (142 m^3/s), estimated, Nov. 27, 1909 (gage height not determined); minimum, 363 ft^3/s (10.3 m^3/s) Jan. 20, 1962.

REMARKS.--Records good. Flow regulated by Crane Prairie Reservoir, Crescent Lake, and Wickiup Resevoir. Many diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,820	1,330	1,180	1,280	1,440	1,070	1,300	1,960	2,430	2,540	2,360	1,810
2	1,810	1,320	1,160	1,280	1,440	1,020	1,300	1,990	2,430	2,580	2,350	1,820
3	1,810	1,340	1,160	1,260	1,440	1,040	1,300	2,040	2,480	2,580	2,340	1,810
4	1,810	1,360	1,140	1,240	1,440	1,040	1,290	2,130	2,550	2,580	2,320	1,810
5	1,810	1,360	982	1,220	1,440	1,030	1,280	2,130	2,570	2,580	2,310	1,810
6	1,770	1,360	923	1,220	1,460	1,020	1,260	2,050	2,620	2,580	2,310	1,810
7	1,740	1,380	1,050	1,220	1,460	1,010	1,300	1,940	2,670	2,520	2,310	1,820
8	1,690	1,370	1,040	1,200	1,420	1,010	1,400	1,660	2,680	2,440	2,310	1,820
9	1,680	1,360	1,050	1,020	1,390	1,000	1,420	1,800	2,630	2,410	2,310	1,820
10	1,690	1,380	1,050	1,170	1,380	1,010	1,480	1,840	2,610	2,450	2,300	1,830
11	1,720	1,440	1,060	1,280	1,380	1,010	1,590	1,840	2,580	2,530	2,290	1,790
12	1,740	1,440	1,070	1,360	1,380	1,010	1,710	1,890	2,480	2,550	2,260	1,720
13	1,750	1,450	1,090	1,290	1,370	1,030	1,760	2,020	2,390	2,550	2,240	1,710
14	1,760	1,460	1,110	1,300	1,340	1,020	1,760	2,060	2,370	2,560	2,170	1,660
15	1,670	1,380	1,130	1,310	1,340	1,010	1,770	2,160	2,360	2,560	2,140	1,450
16	1,570	1,220	1,150	1,370	1,310	1,000	1,770	2,370	2,360	2,560	2,120	1,420
17	1,580	1,260	1,200	1,390	1,300	1,000	1,770	2,430	2,330	2,550	2,070	1,410
18	1,520	1,260	1,250	1,480	1,290	1,000	1,770	2,500	2,260	2,540	2,070	1,470
19	1,460	1,260	1,270	1,570	1,280	1,000	1,640	2,580	2,240	2,550	2,060	1,530
20	1,450	1,260	1,240	1,520	1,280	1,000	1,610	2,610	2,240	2,570	2,060	1,540
21	1,450	1,260	1,280	1,500	1,280	1,000	1,610	2,640	2,250	2,560	2,050	1,540
22	1,440	1,260	1,390	1,470	1,280	1,000	1,610	2,670	2,280	2,530	2,050	1,520
23	1,440	1,250	1,430	1,460	1,280	1,100	1,650	2,670	2,300	2,510	2,040	1,430
24	1,440	1,240	1,440	1,450	1,260	1,280	1,720	2,650	2,300	2,500	2,050	1,400
25	1,440	1,240	1,440	1,460	1,260	1,290	1,840	2,600	2,300	2,490	2,030	1,340
26	1,440	1,250	1,460	1,440	1,260	1,290	1,920	2,410	2,320	2,470	1,980	1,280
27	1,440	1,240	1,500	1,440	1,270	1,300	1,930	2,330	2,360	2,440	1,980	1,280
28	1,440	1,250	1,520	1,440	1,200	1,300	1,920	2,310	2,370	2,390	1,970	1,260
29	1,430	1,260	1,420	1,430	------	1,300	1,920	2,300	2,390	2,370	1,930	1,210
30	1,380	1,210	1,340	1,430	------	1,300	1,950	2,300	2,440	2,360	1,910	1,170
31	1,340	------	1,390	1,440	------	1,300	------	2,390	------	2,350	1,830	------
TOTAL	49,530	39,450	37,915	41,940	37,670	33,790	48,550	69,270	72,590	77,750	66,520	47,290
MEAN	1,598	1,315	1,223	1,353	1,345	1,090	1,618	2,235	2,420	2,508	2,146	1,576
MAX	1,820	1,460	1,520	1,570	1,460	1,300	1,950	2,670	2,680	2,580	2,360	1,830
MIN	1,340	1,210	923	1,020	1,200	1,000	1,260	1,660	2,240	2,350	1,830	1,170
AC-FT	98,240	78,250	75,200	83,190	74,720	67,020	96,300	137,400	144,000	154,200	131,900	93,800

CAL YR 1972 TOTAL 668,475 MEAN 1,826 MAX 2,630 MIN 900 AC-FT 1,326,000
WTR YR 1973 TOTAL 622,265 MEAN 1,705 MAX 2,680 MIN 923 AC-FT 1,234,000

DIVERSIONS FROM DESCHUTES RIVER NEAR BEND, OREG.

The following six canals, all in Deschutes County, which are equipped with water-stage recorders, are the only diversions from Deschutes River between gaging stations at Benham Falls and below Bend.

14065500 ARNOLD CANAL NEAR BEND diverts at mile 174.5 (280.8 km) from right bank at head of Lava Island, in SW¼ sec.27, T.18 S., R.11 E.; water used for irrigation southeast of Bend. Records available, October 1912 to current year.

14066500 CENTRAL OREGON CANAL ABOVE PILOT BUTTE CANAL, NEAR BEND diverts at mile 169.5 (272.7 km) from right bank in NE¼ sec.13, T.18 S., R.11 E.; water used for irrigation east of Bend. Beginning Oct. 1, 1932, record obtained upstream from intake of Pilot Butte Canal. Records available October 1932 to current year.

14068500 DESCHUTES COUNTY MUNICIPAL IMPROVEMENT DISTRICT CANAL AT BEND diverts at mile 165.8 (266.8 km) from left bank in SW¼SE¼ sec.29, T.17 S., R.12 E., at Bend; water stored in Crescent Lake for Tumalo project is diverted by this canal and supplements flow in Tumalo project feed canal for irrigation near Tumalo. Records available May 1923 to current year.

14069000 NORTH UNIT MAIN CANAL NEAR BEND diverts at mile 164.8 (265.2 km) from right bank to NE¼ sec.29, T.17 S., R.12 E; water used for irrigation near Madras. Records available October 1945 to current year.

14069500 NORTH CANAL NEAR BEND diverts at mile 164.8 (265.2 km) from right bank in NE¼ sec.29, T.17 S., R.12 E.; water used for irrigation north of Bend, mostly near Redmond. Records available June 1913 to current year.

14070000 SWALLEY CANAL NEAR BEND diverts at mile 164.8 (265.2 km) from right bank in NE¼ sec.29, T.17 S., R.12 E.; water used for irrigation north of Bend. Records available 1913 to current year.

Records of monthly discharge of these canals, published as a group, **are available from October 1926** to current year; records for each canal published separately prior to 1926.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Month	Arnold Canal	Central Oregon Canal	Deschutes County Municipal Improvement District Canal	North Unit main canal	North Canal	Swalley Canal	Total
October	3,050	15,980	0	16,510	15,860	4,570	55,970
November	407	1,990	0	0	1,800	510	4,707
December	424	2,220	0	0	1,850	966	5,460
January	284	2,000	0	0	1,490	478	4,252
February	395	2,000	0	0	1,940	411	4,746
March	373	2,020	34	0	1,790	976	5,193
April	2,480	18,610	62	33,850	18,340	3,210	76,552
May	6,390	33,170	3,510	47,590	30,760	5,960	127,380
June	7,090	35,190	5,770	45,970	33,220	7,100	134,340
July	7,590	37,280	7,050	50,480	35,640	6,770	144,810
August	7,390	36,740	6,840	31,380	35,130	7,320	124,800
September	5,680	28,960	1,040	19,170	26,060	5,470	86,380
WTR YR 1973	41,540	216,100	24,500	245,000	203,900	43,740	774,780

14070500 DESCHUTES RIVER BELOW BEND, OREG.

LOCATION.--Lat 44°04'59", long 121°18'24", in SE¼SE¼ sec.20, T.17 S., R.12 E., Deschutes County, on right bank 0.4 mi (0.6 km) downstream from North Canal, 0.5 mi (0.8 km) north of Bend city limits, and at mile 164.4 (264.5 km).

DRAINAGE AREA.--1,899 mi^2 (4,918 km^2).

PERIOD OF RECORD.--October 1914 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,503.96 ft (1,068.007 m) above mean sea level. Prior to Oct. 1, 1931, water-stage recorder at site 200 ft (61 m) downstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--59 years, 523 ft^3/s (14.81 m^3/s), 378,900 acre-ft/yr (467 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft^3/s (40.8 m^3s) Jan. 19; maximum gage height, 4.77 ft (1.454 m) Dec. 9 (backwater from ice); minimum discharge, 19 ft^3/s (0.54 m^3/s) July 20.

Period of record: Maximum discharge, 2,820 ft^3/s (79.9 m^3/s) Dec. 27, 1964, gage height, 4.90 ft (1.494 m); maximum gage height, 5.38 ft (1.640 m) Dec. 15, 1932 (backwater from ice); minimum discharge, 1.0 ft^3/s (0.028 m^3/s) Aug. 25, 1930.

Maximum discharge near this site since 1905, 4,820 ft^3/s (137 m^3/s) Nov. 27, 1909.

REMARKS. Records good. Flow regulated by powerplant at Bend, Crescent Lake, Crane Prairie Reservoir, and Wickiup Reservoir (see elsewhere in this report). Six large canals and several small ditches divert water above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1318: 1916-18(M), 1926(M), 1931(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	1.250	1.060	1.140	1.300	940	725	31	30	30	42	25
2	290	1.240	1.040	1.150	1.310	879	718	33	28	28	38	25
3	274	1.270	1.040	1.120	1.300	879	725	32	28	28	34	26
4	259	1.280	1.020	1.110	1.300	893	718	31	30	27	35	26
5	263	1.280	920	1.100	1.310	872	642	31	31	26	35	27
6	286	1.280	360	1.090	1.320	865	480	30	36	30	32	26
7	286	1.280	950	1.080	1.320	865	470	31	75	27	30	27
8	244	1.280	932	1.060	1.310	858	335	32	90	27	28	26
9	229	1.280	932	930	1.260	830	64	34	63	32	30	26
10	244	1.280	932	1.000	1.230	809	42	34	36	31	28	26
11	315	1.340	942	1.130	1.010	690	27	34	27	31	28	26
12	380	1.360	952	1.250	988	600	28	34	26	38	28	24
13	445	1.370	962	1.150	932	630	26	34	28	38	27	25
14	450	1.380	972	924	835	600	25	36	28	36	27	26
15	410	1.320	982	666	872	618	24	35	26	34	27	32
16	290	1.090	1.010	642	1.070	802	26	42	27	31	26	30
17	290	1.080	972	660	1.060	795	28	41	26	25	26	30
18	270	1.100	790	851	988	690	31	42	26	22	25	30
19	201	1.040	660	1.390	900	630	30	48	26	21	25	34
20	179	893	582	1.360	893	618	30	75	26	22	26	35
21	306	851	600	1.350	893	624	28	79	25	32	26	35
22	816	830	697	1.350	964	672	28	97	30	32	26	32
23	962	816	1.130	1.330	1.120	872	28	114	32	33	26	28
24	1.210	1.080	1.260	1.320	1.120	1.110	28	127	31	34	25	28
25	1.280	1.070	1.270	1.320	1.100	1.120	30	97	31	34	26	28
26	1.280	972	1.300	1.310	1.110	1.100	31	40	33	34	26	28
27	1.280	879	1.380	1.300	1.120	1.070	32	33	32	33	25	28
28	1.290	886	1.410	1.300	1.100	1.060	33	32	34	34	25	28
29	1.290	893	1.330	1.290	------	1.060	44	32	38	34	25	28
30	1.260	948	1.220	1.290	------	1.070	34	31	30	36	24	28
31	1.210	------	1.180	1.300	------	1.060	------	30	------	40	24	------
TOTAL	18.083	33.918	31.287	35.263	31.035	26.181	5.510	1.452	1.029	960	875	843
MEAN	583	1.131	1.009	1.138	1.108	845	184	46.8	34.3	31.0	28.2	28.1
MAX	1.290	1.380	1.410	1.390	1.320	1.120	725	127	90	40	42	35
MIN	179	816	582	642	835	600	24	30	25	21	24	24
AC-FT	35.870	67.280	62.060	69.940	61.560	51.930	10.930	2.880	2.040	1.900	1.740	1.670

CAL YR 1972 TOTAL 228.877 MEAN 625 MAX 1.770 MIN 32 AC-FT 454.000
WTR YR 1973 TOTAL 186.436 MEAN 511 MAX 1.410 MIN 21 AC-FT 369.800

14073000 TUMALO CREEK NEAR BEND, OREG.

LOCATION.--Lat 44°05'16", long 121°22'18", in NW¼SE¼ sec.23, T.17 S., R.11 E., Deschutes County, on left bank 0.25 mi (0.40 km) upstream from Tumalo feed canal, 4 mi (6.4 km) northwest of Bend, and at mile 3.1 (5.0 km).

DRAINAGE AREA.--47.3 mi² (123 km²).

PERIOD OF RECORD.--October 1913 to December 1921, February, April to November 1922, March 1923 to current year. Published as "below Bend" 1949-50.

GAGE.--Water-stage recorder. Datum of gage is 3,566.82 ft (1,087.167 m) above mean sea level. Prior to Apr. 27, 1915, nonrecording gage and Apr. 27, 1915, to Sept. 30, 1918, water-stage recorder or nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--55 years (1913-14, 1916-21, 1923-35, 1936-73), 102 ft³/s (2.889 m³/s), 73,900 acre-ft/yr (91.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 310 ft³/s (8.78 m³/s) June 8; minimum daily, 31 ft³/s (0.88 m³/s) Dec. 9, 10.
Period of record: Maximum discharge, 1,140 ft³/s (32.3 m³/s) Nov. 9, 1968 (no flow in canal), from rating curve extended above 780 ft³/s (22.1 m³/s) on basis of slope-area measurement at 3.45 ft (1.052 m); minimum daily, 25 ft³/s (0.71 m³/s) Jan. 3, 1924.

REMARKS.--Records good. All records given herein include flow in Columbia Southern Canal, which diverts 8 mi (13 km) above station for irrigation of land near Tumalo. No flow in the canal Nov. 21 to May 7. Crater Creek Canal diverts flow of tributaries of Soda Creek into head of Tumalo Creek. Diversion above station for municipal supply of Bend began Dec. 15, 1926, and averaged 8.4 ft³/s (0.24 m³/s) for water year 1973.

REVISIONS (WATER YEARS).--WSP 864: 1937. WSP 1218: Drainage area. WSP 1448: 1923(M), 1927-29(M), 1935-38(M), 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	75	62	94	69	68	59	81	162	75	55	46
2	75	77	60	78	69	68	57	83	143	71	51	46
3	75	80	62	76	69	68	57	93	134	74	50	44
4	75	83	57	76	69	66	57	93	134	81	51	44
5	75	75	42	72	68	66	59	89	138	85	51	42
6	75	73	44	68	66	66	59	95	172	78	52	42
7	75	72	36	62	66	66	59	83	201	70	51	57
8	75	71	32	58	64	64	59	86	223	71	50	55
9	75	71	31	56	64	64	60	86	221	68	51	52
10	75	70	31	60	64	66	62	86	150	63	51	50
11	81	70	46	80	64	66	66	87	122	62	48	49
12	81	68	50	106	64	66	68	101	124	59	48	49
13	85	67	54	130	62	64	69	134	121	60	48	49
14	83	64	60	115	62	64	68	153	98	63	47	53
15	85	62	66	97	60	64	68	180	87	62	47	53
16	81	60	74	95	62	64	71	201	89	61	47	53
17	75	59	84	89	68	64	71	225	85	58	48	52
18	74	58	90	87	66	64	68	235	77	57	48	55
19	73	58	94	81	68	64	64	232	71	60	47	59
20	78	52	100	81	66	64	64	217	78	72	46	66
21	75	59	100	81	66	64	62	189	91	66	44	71
22	76	59	100	78	66	62	66	178	94	61	43	68
23	74	60	94	77	66	62	68	185	95	56	44	93
24	74	59	90	77	66	62	69	265	91	53	52	93
25	73	66	94	77	68	62	71	216	138	52	53	89
26	73	102	100	71	68	62	79	167	202	54	46	69
27	72	75	100	70	68	59	85	148	140	54	44	66
28	72	68	90	70	68	59	85	145	105	54	43	62
29	72	64	90	70	------	57	81	154	93	54	42	60
30	72	62	90	71	------	57	79	170	84	52	43	60
31	73	------	86	71	------	59	------	170	------	52	47	------
TOTAL	2,352	2,039	2,209	2,474	1,846	1,971	2,010	4,627	3,763	1,958	1,488	1,747
MEAN	75.9	68.0	71.3	79.8	65.9	63.6	67.0	149	125	63.2	48.0	58.2
MAX	85	102	100	130	69	68	85	265	223	85	55	93
MIN	72	52	31	56	60	57	57	81	71	52	42	42
AC-FT	4,670	4,040	4,380	4,910	3,660	3,910	3,990	9,180	7,460	3,880	2,950	3,470

CAL YR 1972 TOTAL 44,540 MEAN 122 MAX 445 MIN 31 AC-FT 88,350
WTR YR 1973 TOTAL 28,484 MEAN 78.0 MAX 265 MIN 31 AC-FT 56,500

14075000 SQUAW CREEK NEAR SISTERS, OREG.

LOCATION.--Lat 44°14'02", long 121°33'57", in SE¼SW¼ sec.29, T.15 S., R.10 E., Deschutes County, on right bank 800 ft (244 m) upstream from intake of McAllister ditch, 4 mi (6 km) south of Sisters, and at mile 26.8 (43.1 km).

DRAINAGE AREA.--54.8 mi^2 (141.9 km^2).

PERIOD OF RECORD.--July 1906 to October 1918, June to August 1919, October 1919 to September 1920, May 1921 to September 1924 (no winter records), April 1925 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Altitude of gage is 3,490 ft (1,064 m), by barometer. July 1, 1906, to May 29, 1913, nonrecording gage at site 1,000 ft (305 m) downstream at different datum, below intake of McAllister ditch (records include flow in McAllister ditch). May 30, 1913, to Sept. 2, 1915, nonrecording gage and Mar. 24, 1916, to Oct. 5, 1928, water-stage recorder at site 300 ft (91 m) downstream at different datum. Oct. 6, 1928, to Nov. 7, 1967, water-stage recorder at site 200 ft (61 m) downstream at datum 2.64 ft (0.805 m) lower.

AVERAGE DISCHARGE.--61 years (1906-18, 1919-20, 1925-73), 106 ft^3/s (3.002 m^3/s), 76,800 acre-ft/yr (94.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 274 ft^3/s (7.76 m^3/s) June 26, gage height, 2.89 ft (0.881 m); maximum gage height, 7.40 ft (2.256 m) Dec. 14, backwater from ice; minimum discharge, 33 ft^3/s (0.93 m^3/s) Apr. 2.

Period of record: Maximum discharge since 1909, 1,980 ft^3/s (56.1 m^3/s) Dec. 23, 1964, from rating curve extended above 280 ft^3/s (7.93 m^3/s) on basis of slope-area measurement of peak flow; maximum gage height, about 8.75 ft (2.667 m), over top of gage. Nov. 22, 1909, site and datum then in use (discharge not determined); minimum discharge, 14 ft^3/s (0.396 m^3/s) Mar. 2, 1966.

REMARKS.--Records good. No regulation. A canal near mouth of Pole Creek, a tributary above station, diverts entire flow of that creek for irrigation of lands near Sisters.

REVISIONS.--WSP 1218: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	73	60	95	60	49	42	58	133	110	86	55
2	80	74	59	74	59	49	42	62	127	110	87	55
3	79	86	60	74	59	48	43	66	122	114	86	57
4	79	80	52	73	59	47	43	64	124	129	82	60
5	78	70	40	70	58	46	46	62	133	135	84	64
6	78	67	42	66	58	47	46	67	154	124	89	66
7	78	67	39	60	58	46	46	66	172	110	79	73
8	76	66	36	56	59	46	46	67	198	110	78	59
9	76	66	34	54	57	46	48	64	182	110	78	59
10	79	64	34	56	57	50	50	64	142	108	74	63
11	79	63	47	76	55	48	52	66	131	104	74	64
12	80	63	50	100	54	47	55	74	140	96	74	64
13	86	63	52	156	54	47	55	89	133	96	78	63
14	86	62	58	122	54	47	52	108	116	100	78	62
15	79	60	62	100	53	46	52	135	106	100	78	59
16	76	60	76	95	53	46	53	158	108	102	74	57
17	73	60	84	86	53	46	52	175	98	100	70	55
18	72	60	90	82	53	46	49	182	91	96	67	60
19	72	60	94	79	54	46	49	170	91	102	67	70
20	72	57	94	82	52	44	48	149	96	108	68	78
21	70	58	100	78	50	44	48	135	110	93	67	68
22	70	57	96	78	50	42	49	138	118	82	67	73
23	68	59	90	78	49	42	50	149	120	78	64	91
24	67	55	86	70	49	43	50	217	124	74	66	91
25	67	73	90	68	50	43	55	163	178	76	59	76
26	67	116	102	63	50	43	59	129	234	80	58	62
27	65	78	98	62	50	42	62	116	195	86	58	59
28	63	68	89	62	50	42	59	118	175	87	59	57
29	63	63	89	64	------	42	58	129	147	84	62	57
30	67	60	87	70	------	42	57	138	124	82	62	55
31	72	------	84	64	------	43	------	140	------	82	59	------
TOTAL	2.299	2.008	2.174	2.413	1.517	1.405	1.516	3.518	4.122	3.068	2.232	1.932
MEAN	74.2	66.9	70.1	77.8	54.2	45.3	50.5	113	137	99.0	72.0	64.4
MAX	86	116	102	156	60	50	62	217	234	135	89	91
MIN	63	55	34	54	49	42	42	58	91	74	58	55
AC-FT	4.560	3.980	4.310	4.790	3.010	2.790	3.010	6.980	8.180	6.090	4.430	3.830

CAL YR 1972 TOTAL 50.388 MEAN 138 MAX 400 MIN 34 AC-FT 99.940
WTR YR 1973 TOTAL 28.204 MEAN 77.3 MAX 234 MIN 34 AC-FT 55.940

PEAK DISCHARGE (BASE, 470 CFS).--No peak above base.

14076500 DESCHUTES RIVER NEAR CULVER, OREG.

LOCATION.--Lat 44°29'56", long 121°19'12", in NW¼SE¼ sec.29, T.12 S., R.12 E., Jefferson County, on right bank 2.5 mi (4.0 km) downstream from Squaw Creek, 6.0 mi (9.7 km) southwest of Culver, and at mile 120.6 (194.0 km).

DRAINAGE AREA.--2,705 mi^2 (7,006 km^2).

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,980 ft (603 m) above mean sea level (river-profile survey). July 14, 1952, to Sept. 30, 1961, at site 4.1 mi (6.6 km) downstream at different datum.

AVERAGE DISCHARGE.--21 years, 904 ft^3/s (25.6 m^3/s), 654,900 acre-ft/yr (807 hm^3).

EXTREMES.--Current year: Maximum discharge, 2,160 ft^3/s (61.2 m^3/s) Dec. 17, gage height, 5.52 ft (1.682 m); minimum, 503 ft^3/s (14.2 m^3/s) July 21, 22.

Period of record: Maximum discharge, 6,680 ft^3/s (189 m^3/s) Dec. 24, 1964, gage height, 10.00 ft (3.048 m), from rating curve extended above 2,200 ft^3/s (62.3 m^3/s) on basis of slope-area measurement of peak flow; minimum, 418 ft^3/s (11.8 m^3/s) July 7, 8, 1964.

REMARKS.--Records excellent. Slight regulation by Crescent Lake and Crane Prairie and Wickiup Reservoirs (see elsewhere in this report). Many diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	828	1.730	1.650	1.810	1.960	1.690	1.560	551	516	520	517	511
2	799	1.740	1.680	1.840	1.950	1.570	1.240	540	519	517	525	513
3	791	1.730	1.670	1.840	1.940	1.520	1.360	548	516	515	527	517
4	779	1.760	1.640	1.800	1.940	1.530	1.350	562	516	513	522	516
5	760	1.760	1.550	1.780	1.940	1.520	1.350	562	515	515	524	518
6	766	1.750	1.450	1.780	1.960	1.450	1.170	549	515	513	522	524
7	794	1.760	1.420	1.730	1.960	1.430	1.060	552	516	513	520	521
8	785	1.770	1.450	1.680	1.950	1.430	1.090	549	562	517	518	516
9	754	1.770	1.400	1.650	1.920	1.420	817	538	617	513	516	518
10	745	1.760	1.420	1.510	1.890	1.380	635	529	607	514	515	519
11	765	1.780	1.500	1.780	1.890	1.410	569	530	548	514	513	516
12	870	1.840	1.610	2.030	1.640	1.210	568	525	531	513	513	515
13	948	1.860	1.620	2.040	1.590	1.200	569	535	521	517	513	516
14	992	1.860	1.600	1.960	1.540	1.220	568	529	518	522	513	517
15	1.000	1.850	1.610	1.480	1.470	1.160	563	526	518	523	512	521
16	961	1.710	1.720	1.370	1.600	1.260	560	529	518	522	512	524
17	837	1.580	1.830	1.370	1.700	1.370	557	538	515	521	512	527
18	831	1.610	1.810	1.370	1.720	1.370	561	550	516	514	512	530
19	793	1.620	1.540	1.800	1.560	1.220	569	571	518	511	511	532
20	726	1.510	1.420	2.090	1.550	1.190	550	571	516	514	512	537
21	712	1.480	1.650	2.050	1.550	1.180	546	581	516	511	513	546
22	1.010	1.470	1.660	2.050	1.550	1.180	545	572	517	508	513	559
23	1.380	1.470	1.750	2.030	1.700	1.390	547	580	516	515	511	552
24	1.550	1.550	2.070	2.020	1.790	1.590	547	606	525	514	513	566
25	1.770	1.690	2.060	2.020	1.770	1.740	540	694	528	516	516	576
26	1.770	1.780	2.040	2.000	1.770	1.720	535	631	534	515	519	575
27	1.760	1.610	2.090	1.980	1.780	1.630	539	557	572	516	517	555
28	1.770	1.570	2.070	1.990	1.790	1.620	544	526	550	514	514	548
29	1.770	1.560	2.040	1.980	------	1.620	548	521	525	514	513	544
30	1.760	1.560	1.940	1.960	------	1.630	555	522	531	514	510	542
31	1.710	------	1.860	1.960	------	1.630	------	522	------	514	513	------
TOTAL	33.486	50.490	52.820	56.750	49.370	44.480	22.732	17.196	15.932	15.972	15.981	15.971
MEAN	1.080	1.683	1.704	1.831	1.763	1.435	758	555	531	515	516	532
MAX	1.770	1.860	2.090	2.090	1.960	1.740	1.560	694	617	523	527	576
MIN	712	1.470	1.400	1.370	1.470	1.160	535	521	515	508	510	511
AC-FT	66.420	100.100	104.800	112.600	97.930	88.230	45.090	34.110	31.600	31.680	31.700	31.680

CAL YR 1972 TOTAL 455.163 MEAN 1.244 MAX 2.540 MIN 531 AC-FT 902.800
WTR YR 1973 TOTAL 391.180 MEAN 1.072 MAX 2.090 MIN 508 AC-FT 775.900

14078000 BEAVER CREEK NEAR PAULINA, OREG.

LOCATION.--Lat 44°09'50", long 119°55'20", in NE¼ sec.26, T.16 S., R.23 E., Crook County, on right bank 0.7 mi (1.1 km) downstream from Paulina Creek, 1.7 mi (2.7 km) downstream from Wolf Creek, 2.7 mi (4.3 km) northeast of Paulina, and at mile 10.0 (16.1 km).

DRAINAGE AREA.--450 mi² (1,170 km²), approximately.

PERIOD OF RECORD.--October 1942 to current year. Prior to October 1945 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Altitude of gage is 3,690 ft (1,120 m), by barometer. Oct. 1, 1942, to July 7, 1965, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--31 years, 87.4 ft³/s (2.48 m³/s), 63,320 acre-ft/yr (78.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 542 ft³/s (15.3 m³/s) Dec. 21, gage height, 3.67 ft (1.119 m); minimum, 0.13 ft³/s (0.004 m³/s) July 10-13.

Period of record: Maximum discharge, 12,800 ft³/s (362 m³/s) Dec. 22, 1964, gage height, 14.20 ft (4.328 m), from floodmark, present datum, from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flow; no flow Oct. 13-29, 1945.

REMARKS.--Records fair. No regulation. Diversions for irrigation above station. Two small ditches divert above station for irrigation below.

REVISIONS (WATER YEARS).--WSP 1348: Drainage area. WSP 1448: 1946, 1948, 1949-50(M), 1951-52.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	6.5	13	31	80	258	75	28	.46	.27	1.3	.38
2	.30	7.7	12	30	55	193	63	20	.40	.21	1.4	.39
3	.30	8.1	13	28	40	154	56	14	.38	.20	.31	.36
4	.30	8.1	12	27	45	122	55	27	.44	.19	.20	.36
5	.30	8.1	10	26	50	112	59	36	.43	.19	.17	.39
6	.30	7.7	9.7	25	55	110	65	29	.42	.19	.23	.38
7	.30	7.7	9.7	25	50	98	60	20	.47	.19	.28	.37
8	.30	8.5	8.5	25	45	101	63	19	.46	.18	.27	.30
9	.36	8.1	8.1	30	40	112	67	13	.46	.17	.27	.24
10	.36	8.5	8.0	35	70	142	70	8.6	.56	.17	.28	.35
11	2.8	8.5	7.5	50	66	130	78	7.2	.61	.16	.26	2.3
12	5.8	8.9	7.5	90	55	104	92	6.5	.70	.16	.25	3.7
13	5.4	8.9	7.5	110	52	89	120	5.4	.92	1.5	.26	3.6
14	5.4	8.9	7.5	210	52	80	126	5.3	1.0	2.1	.25	3.6
15	5.4	8.5	8.0	150	55	73	109	3.3	1.1	2.0	.27	5.4
16	5.4	9.3	8.5	240	56	73	95	1.7	1.4	2.5	.28	5.8
17	5.4	10	9.0	250	61	73	85	1.3	.84	2.5	.29	6.2
18	5.8	10	10	150	48	68	81	1.4	.51	1.0	.28	6.0
19	5.8	11	25	100	42	71	81	1.2	.51	.56	.26	6.0
20	5.8	11	70	70	39	74	70	1.3	.48	1.5	.26	6.0
21	5.8	11	430	80	39	84	56	1.4	.45	1.3	.25	5.8
22	6.1	11	325	70	39	82	49	1.3	.40	1.4	1.7	5.9
23	6.1	10	158	80	36	70	49	1.3	.40	1.7	4.1	6.0
24	5.8	10	151	65	43	77	46	1.5	.35	1.1	4.5	6.3
25	6.1	11	104	55	65	87	44	2.0	.34	.20	4.6	5.8
26	6.1	11	73	60	84	98	40	1.9	.34	.21	3.3	5.6
27	6.1	12	63	80	132	97	40	1.5	.32	.25	3.6	5.8
28	6.1	12	59	140	176	91	43	1.4	.29	.22	2.2	5.5
29	6.1	12	51	200	------	81	46	1.4	.26	.22	.82	5.7
30	6.1	13	42	150	------	78	41	1.1	.25	.27	.42	5.4
31	6.5	------	36	120	------	80	------	.70	------	.95	.38	------
TOTAL	123.02	287.0	1,756.5	2,802	1,670	3,162	2,024	264.70	15.95	23.76	33.24	109.92
MEAN	3.97	9.57	56.7	90.4	59.6	102	67.5	8.54	.53	.77	1.07	3.66
MAX	6.5	13	430	250	176	258	126	36	1.4	2.5	4.6	6.3
MIN	.30	6.5	7.5	25	36	68	40	.70	.25	.16	.17	.24
AC-FT	244	569	3,480	5,560	3,310	6,270	4,010	525	32	47	66	218

CAL YR 1972 TOTAL 43,964.84 MEAN 120 MAX 2,090 MIN .30 AC-FT 87,200
WTR YR 1973 TOTAL 12,272.09 MEAN 33.6 MAX 430 MIN .16 AC-FT 24,340

PEAK DISCHARGE (BASE, 700 CFS).--No peak above base.

NOTE.--No gage-height record Jan. 4 to Feb. 9.

14079500 CROOKED RIVER NEAR POST, OREG.

LOCATION.--Lat 44°07'00", long 120°15'00", in NE¼ sec.7, T.17 S., R.21 E., Crook County, on left bank 0.3 mi (0.5 km) downstream from North Fork, 12 mi (19 km) southeast of Post, and at mile 113.7 (182.9 km).

DRAINAGE AREA.--2,160 mi² (5,590 km²), approximately, of which 500 mi² (1,300 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1908 to May 1911, December 1939 to September 1960, July 1968 to July 1973 (discontinued). Records for June to August 1911, published in WSP 312, have been found unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 3,476.25 ft (1,059.561 m) above mean sea level. Nov. 9, 1908, to Aug. 31, 1911, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Dec. 30, 1939, to Sept. 30, 1960, water-stage recorder at site 0.7 mi (1.1 km) downstream at different datum.

AVERAGE DISCHARGE.--24 years (1940-60, 1968-72), 337 ft³/s (9.544 m³/s), 244,200 acre-ft/yr (301 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,120 ft³/s (60.0 m³/s) Dec. 22, gage height, 6.21 ft (1.843 m); minimum daily, 5.0 ft³/s (0.14 m³/s) July 25, 28, 29.

Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Jan. 18, 1971, gage height, 9.61 ft (2.929 m), from rating curve extended above 4,800 ft³/s (136 m³/s) on basis of slope-area measurement of peak flow; minimum, 2.7 ft³/s (0.076 m³/s) Aug. 7, 1970.

Flood of Dec. 23, 1964, reached a stage of 15.00 ft (4.572 m) at nonequivalent site 23 mi (37 km) downstream, discharge, 19,700 ft³/s (558 m³/s).

REMARKS.--Records good. No regulation. Many diversions for irrigation above station.

REVISIONS.--See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	67	74	113	140	624	335	249	39	11		
2	22	67	72	105	110	546	282	221	37	12		
3	19	80	80	100	103	445	270	228	34	14		
4	21	82	70	110	108	355	335	294	31	14		
5	24	80	76	115	120	310	465	395	27	14		
6	26	82	74	125	143	320	516	375	23	12		
7	27	82	103	140	135	298	470	286	21	12		
8	27	80	120	160	130	294	450	260	20	10		
9	27	76	138	170	118	325	505	239	19	12		
10	31	74	143	190	135	395	528	214	15	13		
11	38	72	167	210	188	430	630	185	14	13		
12	41	72	180	225	167	345	700	164	15	13		
13	45	70	190	286	149	282	802	146	15	12		
14	58	70	200	576	152	256	770	125	14	13		
15	88	69	210	375	152	242	644	118	13	14		
16	44	70	220	618	155	263	552	115	14	14		
17	40	72	230	658	167	278	516	105	16	14		
18	39	72	250	465	152	242	440	95	13	14		
19	39	74	290	282	130	263	435	78	14	8.0		
20	39	72	355	185	128	278	425	66	16	11		
21	40	72	1,180	197	128	340	360	57	16	9.0		
22	40	66	1,180	179	125	365	365	51	14	10		
23	41	67	558	194	123	310	425	48	13	12		
24	41	66	370	146	130	405	415	55	14	8.0		
25	41	70	290	143	185	522	425	86	13	5.0		
26	39	76	228	152	232	552	440	84	14	6.0		
27	40	72	197	270	290	470	455	66	14	6.0		
28	51	86	170	460	435	400	385	58	13	5.0		
29	57	82	152	564	------	330	320	51	12	5.0		
30	57	78	140	480	------	335	282	47	9.5	6.0		
31	58	------	120	274	------	375	------	44	------	10		------
TOTAL	1,225	2,218	7,827	8,267	4,430	11,195	13,942	4,605	542.5	332.0		
MEAN	39.5	73.9	252	267	158	361	465	149	18.1	10.7		
MAX	88	86	1,180	658	435	624	802	395	39	14		
MIN	19	66	70	100	103	242	270	44	9.5	5.0		
AC-FT	2,430	4,400	15,520	16,400	8,790	22,210	27,650	9,130	1,080	659		

CAL YR 1972 TOTAL 140,861.7 MEAN 385 MAX 6,130 MIN 5.9 AC-FT 279,400

PEAK DISCHARGE (BASE, 2,000 CFS).--Dec. 22 (0400) 2,120 cfs (6.21 ft).

14080400 PRINEVILLE RESERVOIR NEAR PRINEVILLE, OREG.

LOCATION.--Lat 44°06'50", long 120°46'50", in SW¼NW¼ sec.11, T.17 S., R.16 E., Crook County, at right end of Prineville Dam on Crooked River, 13.8 mi (22.2 km) south of Prineville, and at mile 72.5 (116.7 km).

DRAINAGE AREA.--2,700 mi² (6,990 km²) approximately, of which 500 mi² (1,300 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Aug. 13, 1969, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 152,000 acre-ft (187 hm³) May 8, elevation, 3,234.34 ft (985.888 m); minimum, 91,700 acre-ft (113 hm³) Sept. 30, elevation, 3,210.62 ft (978.597 m).

Period of record: Maximum contents observed, 165,800 acre-ft (204 hm³) Dec. 27, 1964, elevation, 3,238.95 ft (987.232 m); minimum observed, 70,570 acre-ft (87.0 hm³) Oct. 21, Nov. 1, 1968, elevation, 3,199.65 ft (975.253 m).

REMARKS.--Reservoir is formed by earthfill dam with ungated concrete spillway and concrete outlet tunnel controlled by two 4-ft (1.2 m) by 6-ft (1.8 m) regulating gates. Storage began in December 1960. Total capacity at elevation 3,234.80 ft (985.967 m), crest of spillway, is 154,700 acre-ft (191 hm³), of which 152,800 acre-ft (188 hm³) is active storage above 3,114.00 ft (949.147 m), proposed minimum pool. Reservoir used for flood control, irrigation, and recreation. Figures given herein represent active storage.

COOPERATION.--Gage inspected and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	3,215.29	101,700	-
Oct. 31	3,211.10	92,700	-9,000
Nov. 30	3,212.32	95,200	+2,500
Dec. 31	3,217.23	106,100	+10,900
CAL YR 1972	-	-	+13,200
Jan. 31	3,218.40	108,800	+2,700
Feb. 28	3,219.47	111,300	+2,500
Mar. 31	3,227.33	131,300	+20,000
Apr. 30	3,234.18	150,900	+19,600
May 31	3,232.11	144,800	-6,100
June 30	3,226.92	130,200	-14,600
July 31	3,221.33	115,800	-14,400
Aug. 31	3,215.14	101,400	-14,400
Sept.30	3,210.62	91,700	-9,700
WTR YR 1973	-	-	-10,000

14080500 CROOKED RIVER NEAR PRINEVILLE, OREG.

LOCATION.--Lat 44°06'50", long 120°47'40", in SW¼NE¼ sec.10, T.17 S., R.16 E., Crook County, on right bank 0.4 mi (0.6 km) downstream from Prineville Dam, 13.6 mi (21.9 km) south of Prineville, and at mile 72.1 (116.0 km).

DRAINAGE AREA.--2,700 mi² (7,000 km²), approximately, of which 500 mi² (1,300 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1908 to September 1914, March 1941 to current year. Published as "near Prineville" 1908-12, as "at Hoffman's ranch, near Prineville" 1913-14, and as "above Hoffman Dam, near Prineville" March 1941 to September 1960. The estimate of monthly mean discharge for October 1908, published in WSP 370, has been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 3,070.85 ft (935.995 m) above mean sea level (levels by Bureau of Reclamation.) Prior to September 1914, nonrecording gage at several sites from 9 mi (14 km) to 23 mi (37 km) downstream at various datums. Mar. 26, 1941, to Apr. 23, 1961, water-stage recorder at site 5.5 mi (8.8 km) downstream at different datum.

AVERAGE DISCHARGE.--24 years (1909-14, 1941-60), 378 ft³/s (10.7 m³/s), 273,700 acre-ft/yr (337 hm³/yr); 13 years (1961-73), 286 ft³/s (8.100 m³/s), 207,200 acre-ft/yr (255 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 528 ft³/s (15.0 m³/s) Jan. 20, gage height, 4.26 ft (1.298 m); minimum, 8.7 ft³/s (0.25 m³/s) Nov. 2.

Period of record: Maximum discharge, 8,410 ft³/s (238 m³/s) Mar. 26, 1952, gage height, 8.2 ft (2.50 m), from floodmark, site and datum then in use; no flow Aug. 13-21, 1959, Jan. 3-5, 1961.

REMARKS.--Records excellent. Flow completely regulated since December 1960 by Prineville Reservoir (see station 14080400). Diversions for irrigation above station. Discharge not adjusted for storage or release from Prineville Reservoir as evaporation from reservoir at times exceeds natural flow.

REVISIONS (WATER YEARS).--WSP 1448: 1909-13, 1914(M), drainage area (at sites prior to Apr. 24, 1961). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	32	33	34	114	38	39	220	253	226	222	228
2	229	35	33	34	115	38	38	220	253	226	222	228
3	229	49	33	34	115	38	38	222	253	224	222	227
4	229	84	33	33	115	38	38	222	253	224	222	229
5	229	84	33	34	115	38	38	222	253	224	224	229
6	229	65	33	34	115	38	38	222	253	222	224	229
7	229	52	33	34	115	38	38	222	253	222	224	230
8	229	52	34	34	115	38	38	256	253	222	224	229
9	229	52	33	33	115	38	38	279	253	222	224	227
10	228	41	33	33	115	38	38	279	253	220	225	217
11	228	33	33	79	115	38	38	272	253	220	224	203
12	245	33	34	127	115	38	75	253	253	220	224	201
13	257	33	34	127	117	38	156	253	253	218	224	201
14	256	33	34	129	117	38	156	253	253	218	224	201
15	256	33	34	129	117	38	156	253	251	219	225	201
16	256	33	34	130	117	38	156	253	251	219	226	201
17	256	33	34	233	117	38	156	253	251	218	226	193
18	255	33	34	387	117	39	156	253	251	218	225	184
19	254	33	34	462	97	39	156	256	238	218	225	159
20	173	33	34	525	70	39	156	256	229	218	226	125
21	102	33	34	525	68	39	157	256	230	220	226	107
22	102	33	34	525	66	39	157	256	228	220	226	107
23	102	33	34	352	51	39	157	256	229	220	226	107
24	102	33	34	193	38	39	157	256	229	220	226	106
25	102	33	34	193	38	39	184	256	229	219	227	106
26	126	33	34	153	38	39	218	253	227	221	227	88
27	164	33	34	114	38	39	220	253	227	221	227	76
28	117	33	34	114	38	39	220	253	227	221	227	71
29	36	33	34	114	------	39	220	253	225	221	227	57
30	41	33	34	114	------	39	220	253	226	221	229	57
31	32	------	34	114	------	39	------	253	------	222	229	------
TOTAL	5,751	1,206	1,044	5,176	2,623	1,192	3,652	7,717	7,290	6,844	6,979	5,024
MEAN	186	40.2	33.7	167	93.7	38.5	122	249	243	221	225	167
MAX	257	84	34	525	117	39	220	279	253	226	229	230
MIN	32	32	33	33	38	38	38	220	225	218	222	57
AC-FT	11,410	2,390	2,070	10,270	5,200	2,360	7,240	15,310	14,460	13,580	13,840	9,970

CAL YR 1972 TOTAL 158,216 MEAN 432 MAX 3,190 MIN 32 AC-FT 313,800
WTR YR 1973 TOTAL 54,498 MEAN 149 MAX 525 MIN 32 AC-FT 108,100

14087300 CROOKED RIVER NEAR TERREBONNE, OREG.

LOCATION.--Lat 44°21'30", long 121°07'04", in SE¼NW¼ sec.13, T.14 S., R.13 E., Deschutes County, on left bank 200 ft (61 m) downstream from North Unit Main Canal bridge over Crooked River Gorge, 3.2 mi (5.1 km) east of Terrebonne and at mile 27.0 (43.4 km).

DRAINAGE AREA.--4,240 mi^2 (11,000 km^2), approximately, of which 500 mi^2 (1,300 km^2), is probably noncontributing.

PERIOD OF RECORD.--October 1967 to July 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 2,745.39 ft (836.795 m) above mean sea level (Bureau of Reclamation bench mark). Oct. 1, 1967, to May 12, 1968, at site 500 ft (152 m) upstream at datum 6.33 ft (1.929 m) higher. May 13, 1968, to July 28, 1970, at site 4.2 mi (6.8 km) downstream at altitude 2,610 ft (796 m) from topographic map.

AVERAGE DISCHARGE.--5 years (1967-72), 362 ft^3/s (10.3 m^3/s), 262,300 acre-ft/yr (323 hm^3/yr).

EXTREMES.--Current year: Maximum daily discharge, 600 ft^3/s (17.0 m^3/s) Jan. 21; minimum recorded, 2.8 ft^3/s (0.079 m^3/s) July 1.

Period of record: Maximum discharge, 4,060 ft^3/s (115 m^3/s) Jan. 20, 1971, gage height, 10.97 ft (3.344 m); minimum, 2.8 ft^3/s (0.079 m^3/s) July 1, 1973.

Flood in December 1964 reached a stage of 11.89 ft (3.624 m), from floodmark, at site 500 ft (152 m) upstream (discharge not determined).

REMARKS.--Records poor. Flow regulated by Prineville Reservoir (see station 14080400) and Ochoco Reservoir, capacity, 47,500 acre-ft (58.6 hm^3). Many diversions for irrigation above station; 22,400 acre-ft (27.6 hm^3) was diverted at pumping station, 500 ft (152 m) above gage site, during year.

COOPERATION.--Figures of diversion by pumping furnished by North Unit Irrigation District.

NOTE.--Seasonal records for water years 1961-67 are available and on file in the district office.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	440	130	109	85	150	102	156	117	121	9.2		
2	408	128	104	85	150	104	150	116	117	20		
3	388	128	105	85	150	102	140	116	133	5.6		
4	368	133	99	85	150	104	140	131	122	16		
5	358	170	103	95	160	101	130	138	103	17		
6	400	167	102	92	165	100	130	122	106	12		
7	410	155	100	88	164	99	120	107	86	9.5		
8	410	137	98	83	161	98	120	108	59	24		
9	413	135	94	80	162	98	120	144	32	18		
10	431	137	98	80	166	98	130	155	42	23		
11	449	132	94	80	165	98	120	140	61	14		
12	443	118	92	100	163	97	120	114	48	7.1		
13	473	118	99	190	163	97	140	96	56	17		
14	455	117	94	190	179	96	230	93	30	19		
15	452	116	88	180	185	97	270	73	50	9.6		
16	452	115	86	210	187	98	280	75	45	7.7		
17	455	114	90	220	170	95	250	73	66	13		
18	428	114	140	300	162	95	230	69	56	9.0		
19	419	112	130	490	166	95	230	64	49	9.0		
20	416	111	120	540	156	100	220	71	42	9.0		
21	318	108	150	600	140	110	180	87	27	9.0		
22	246	109	170	590	139	110	200	79	11	10		
23	207	111	150	590	128	97	200	72	17	9.0		
24	199	116	130	440	114	90	170	105	18	10		
25	197	117	100	260	98	83	140	97	22	10		
26	194	110	90	250	99	72	130	90	23	9.0		
27	224	109	85	210	98	75	140	110	16	8.0		
28	256	114	85	180	99	96	150	133	7.5	9.0		
29	212	114	85	160	------	196	130	139	8.8	9.0		
30	140	116	85	160	------	203	120	124	8.5	10		
31	138	------	85	150	------	177	------	135	------	10		------
TOTAL	10,799	3,711	3,260	6,948	4,189	3,283	4,986	3,293	1,582.8	371.7		
MEAN	348	124	105	224	150	106	166	106	52.8	12.0		
MAX	473	170	170	600	187	203	280	155	133	24		
MIN	138	108	85	80	98	72	120	64	7.5	5.6		
AC-FT	21,420	7,360	6,470	13,780	8,310	6,510	9,890	6,530	3,140	737		

CAL YR 1972 TOTAL 187,643 MEAN 513 MAX 3,720 MIN 85 AC-FT 372,200

NOTE.--No gage-height record Jan. 9 to Feb. 6.

14087400 CROOKED RIVER BELOW OPAL SPRINGS, NEAR CULVER, OREG.

LOCATION.--Lat 44°29'33", long 121°17'50", in NW¼NE¼ sec.33, T.12 S., R.12 E., Jefferson County, on right bank 0.2 mi (0.3 km) downstream from Opal Springs, 4.8 mi (7.7 km) southwest of Culver, and at mile 6.7 (10.8 km).

DRAINAGE AREA.--4,300 mi^2 (11,100 km^2), approximately, of which 500 mi^2 (1,300 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,953.60 ft (595.457 m) above mean sea level (Portland General Electric Co. bench mark).

AVERAGE DISCHARGE.--12 years, 1,529 ft^3/s (43.3 m^3/s), 1,108,000 acre-ft/yr (1.37 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,890 ft^3/s (53.5 m^3/s) Jan. 23, gage height, 3.26 ft (0.994 m); minimum, 912 ft^3/s (25.8 m^3/s) Aug. 13-15.

REMARKS.--Records excellent. Flow regulated since December 1960 by Prineville Reservoir (see station 14080400) and Ochoco Reservoir, capacity, 47,500 acre-ft (58.6 hm^3). Many diversions for irrigation above station. Practically all of the summer flow comes from Opal Springs and other springs within 15 mi (24 km) above station. Simultaneous records (1961-63) at former gaging station 5.6 mi (9.0 km) downstream indicated over 15 percent increase to summer flow from springs below this station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,670	1,350	1,310	1,260	1,350	1,260	1,240	1,260	1,300	1,160	1,160	1,240
2	1,660	1,340	1,290	1,260	1,350	1,270	1,240	1,270	1,290	1,170	1,170	1,220
3	1,640	1,350	1,290	1,270	1,350	1,270	1,240	1,260	1,300	1,180	1,170	1,220
4	1,610	1,340	1,290	1,260	1,350	1,270	1,240	1,280	1,320	1,160	1,180	1,220
5	1,620	1,370	1,260	1,260	1,350	1,270	1,230	1,330	1,270	1,180	1,180	1,230
6	1,640	1,390	1,290	1,250	1,350	1,270	1,230	1,300	1,270	1,170	1,180	1,230
7	1,660	1,380	1,280	1,260	1,350	1,270	1,220	1,280	1,260	1,170	1,170	1,210
8	1,660	1,350	1,250	1,240	1,350	1,260	1,220	1,270	1,230	1,170	1,180	1,210
9	1,670	1,340	1,250	1,250	1,350	1,260	1,220	1,290	1,200	1,180	1,190	1,230
10	1,680	1,350	1,250	1,260	1,360	1,260	1,230	1,340	1,180	1,170	1,180	1,250
11	1,700	1,340	1,250	1,260	1,360	1,260	1,220	1,340	1,210	1,180	1,180	1,250
12	1,710	1,330	1,260	1,280	1,350	1,260	1,220	1,300	1,220	1,170	1,180	1,230
13	1,740	1,320	1,260	1,390	1,350	1,260	1,250	1,260	1,220	1,160	1,170	1,220
14	1,770	1,320	1,260	1,390	1,360	1,260	1,340	1,260	1,200	1,180	1,190	1,220
15	1,760	1,320	1,260	1,380	1,370	1,260	1,380	1,240	1,190	1,180	1,170	1,220
16	1,750	1,310	1,270	1,410	1,380	1,260	1,390	1,220	1,210	1,170	1,170	1,220
17	1,770	1,310	1,290	1,420	1,370	1,260	1,360	1,230	1,210	1,160	1,180	1,210
18	1,740	1,310	1,340	1,500	1,350	1,260	1,340	1,220	1,220	1,170	1,180	1,220
19	1,730	1,310	1,330	1,690	1,350	1,260	1,330	1,220	1,210	1,170	1,180	1,250
20	1,730	1,300	1,320	1,740	1,360	1,270	1,320	1,220	1,210	1,170	1,190	1,280
21	1,670	1,300	1,350	1,800	1,330	1,280	1,290	1,230	1,190	1,170	1,190	1,320
22	1,550	1,290	1,370	1,790	1,320	1,280	1,300	1,250	1,180	1,180	1,180	1,320
23	1,500	1,300	1,350	1,800	1,320	1,270	1,300	1,230	1,160	1,170	1,170	1,350
24	1,560	1,300	1,330	1,640	1,300	1,250	1,270	1,250	1,180	1,180	1,180	1,370
25	1,520	1,310	1,300	1,460	1,270	1,250	1,250	1,270	1,180	1,180	1,180	1,370
26	1,430	1,300	1,280	1,450	1,260	1,250	1,240	1,250	1,180	1,170	1,190	1,400
27	1,430	1,290	1,270	1,410	1,260	1,240	1,250	1,270	1,180	1,160	1,200	1,400
28	1,500	1,310	1,270	1,380	1,270	1,240	1,270	1,290	1,170	1,170	1,210	1,380
29	1,480	1,300	1,260	1,360	------	1,240	1,270	1,320	1,160	1,170	1,240	1,360
30	1,370	1,300	1,260	1,360	------	1,240	1,270	1,310	1,160	1,180	1,230	1,340
31	1,350	------	1,260	1,350	------	1,240	------	1,320	------	1,180	1,240	------
TOTAL	50,270	39,730	39,900	43,830	37,440	39,050	38,170	39,380	36,460	36,330	36,760	38,190
MEAN	1,622	1,324	1,287	1,414	1,337	1,260	1,272	1,270	1,215	1,172	1,186	1,273
MAX	1,770	1,390	1,370	1,800	1,380	1,280	1,390	1,340	1,320	1,180	1,240	1,400
MIN	1,350	1,290	1,250	1,240	1,260	1,240	1,220	1,220	1,160	1,160	1,160	1,210
AC-FT	99,710	78,800	79,140	86,940	74,260	77,460	75,710	78,110	72,320	72,060	72,910	75,750

CAL YR 1972 TOTAL 652,670 MEAN 1,783 MAX 5,410 MIN 1,250 AC-FT 1,295,000
WTR YR 1973 TOTAL 475,510 MEAN 1,303 MAX 1,800 MIN 1,160 AC-FT 943,200

14088000 LAKE CREEK NEAR SISTERS, OREG.

LOCATION.--Lat 44°25'35", long 121°43'30", in NE¼SW¼ sec.24, T.13 S., R.8 E., Deschutes County, on left bank 300 ft (91 m) downstream from Suttle Lake and 13 mi (21 km) northwest of Sisters.

DRAINAGE AREA.--22.2 mi² (57.5 km²).

PERIOD OF RECORD.--June to November 1911, March to September 1912, May to October 1913, April 1915 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 3,431.68 ft (1,045.976 m) above mean sea level. Prior to Apr. 1, 1916, nonrecording gage at two sites 400 ft (122 m) upstream at different datums. Apr. 1, 1916, to Oct. 12, 1928, nonrecording gage or water-stage recorder at site 640 ft (195 m) downstream at different datum. Oct. 13, 1928, to Aug. 13, 1967, water-stage recorder at site 600 ft (183 m) downstream at datum 1.61 ft (0.491 m) lower.

AVERAGE DISCHARGE.--58 years (1915-73), 52.3 ft³/s (1.481 m³/s), 37,890 acre-ft/yr (46.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 140 ft³/s (3.96 m³/s) Dec. 24, gage height, 3.12 ft (0.951 m); minimum, 20 ft³/s (0.566 m³/s) Dec. 2.

Period of record: Maximum discharge not determined, Dec. 23, 1964; maximum daily discharge, 500 ft³/s (14.2 m³/s) Dec. 23, 1964; minimum discharge, 1.0 ft³/s (0.028 m³/s) Nov. 4, 5, 1940; minimum daily, 8 ft³/s (0.23 m³/s) Nov. 5, 1940, Oct. 6, 1942.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1124: 1943, 1947. WSP 1218: Drainage area. WSP 1448: 1916(M), 1925.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	41	35	74	53	48	42	47	39	34	32	31
2	38	49	24	67	52	46	41	48	39	34	31	32
3	38	44	27	65	51	45	41	48	39	34	31	32
4	38	44	32	61	52	44	41	49	39	34	32	32
5	37	41	33	59	52	44	42	48	39	34	32	33
6	37	40	33	57	50	44	42	47	39	34	32	32
7	37	40	33	55	50	44	41	47	39	34	32	36
8	38	38	33	54	48	44	42	51	39	34	32	33
9	38	39	33	54	48	43	42	48	39	34	32	32
10	39	40	34	53	51	50	43	47	39	35	32	32
11	40	40	34	54	49	47	43	47	39	34	32	33
12	40	38	36	60	47	45	43	48	39	32	32	32
13	40	40	39	59	46	46	45	47	39	33	34	32
14	41	39	42	65	46	44	44	47	39	34	34	32
15	38	38	40	72	45	43	44	46	39	34	34	30
16	38	38	39	84	44	44	51	44	36	34	33	31
17	38	38	47	83	46	47	50	44	36	34	32	32
18	38	39	52	83	45	45	50	43	36	34	32	34
19	38	38	54	83	44	44	52	40	36	35	32	34
20	38	38	53	79	44	44	51	40	36	36	32	38
21	38	38	71	73	44	44	50	40	36	36	32	37
22	37	38	91	68	44	44	49	40	36	36	30	36
23	37	38	119	66	44	42	49	40	36	36	32	36
24	37	38	133	65	44	42	49	44	36	36	33	38
25	38	43	124	63	45	42	48	44	36	35	33	38
26	38	30	112	60	44	42	49	44	36	35	33	34
27	37	33	108	58	44	41	47	44	36	34	33	32
28	40	36	99	57	44	42	37	44	36	34	31	32
29	38	36	90	55	------	41	42	44	36	34	32	33
30	37	36	84	56	------	42	44	44	36	33	32	32
31	37	------	77	55	------	43	------	44	------	33	32	------
TOTAL	1,181	1,168	1,861	1,997	1,316	1,366	1,354	1,398	1,125	1,063	998	1,001
MEAN	38.1	38.9	60.0	64.4	47.0	44.1	45.1	45.1	37.5	34.3	32.2	33.4
MAX	41	49	133	84	53	50	52	51	39	36	34	38
MIN	37	30	24	53	44	41	37	40	36	32	30	30
AC-FT	2,340	2,320	3,690	3,960	2,610	2,710	2,690	2,770	2,230	2,110	1,980	1,990

CAL YR 1972 TOTAL 27,061 MEAN 73.9 MAX 225 MIN 24 AC-FT 53,680
WTR YR 1973 TOTAL 15,828 MEAN 43.4 MAX 133 MIN 24 AC-FT 31,390

NOTE.--No gage-height record May 25 to July 4, July 15 to Aug. 21.

14091500 METOLIUS RIVER NEAR GRANDVIEW, OREG.

LOCATION.--Lat 44°37'33", long 121°28'55", in SE¼SW¼ sec.12, T.11 S., R.10 E., Jefferson County, Deschutes National Forest, on right bank 1.0 mi (1.6 km) upstream from maximum controlled pool of Lake Billy Chinook, 15.0 mi (24.1 km) northwest of Culver, and at mile 13.6 (21.9 km).

DRAINAGE AREA.--316 mi^2 (818 km^2), at cableway 1.0 mi (1.6 km) downstream, where all discharge measurements are made. Hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--April 1910 to February 1912 (gage heights and discharge measurements only), March 1912 to December 1913, October 1921 to current year. Published as "at Hubbard's ranch, near Sisters" 1910, and as "at Hubbard's ranch, near Grandview" 1910-13.

GAGE.--Water-stage recorder. Datum of gage is 1,974.36 ft (601.785 m) above mean sea level (levels by Portland General Electric Co.). Prior to Dec. 31, 1913, nonrecording gage at site 2.3 mi (3.7 km) upstream at different datum. Oct. 1, 1921, to May 3, 1949, nonrecording gage and May 4, 1949, to June 18, 1963, water-stage recorder at site 2.7 mi (4.3 km) downstream at datum 64 ft (19.5 m) lower.

AVERAGE DISCHARGE.--53 years (1912-13, 1921-73), 1,490 ft^3/s (42.20 m^3/s), 1,080,000 acre-ft/yr (1.33 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,910 ft^3/s (82.4 m^3/s) Dec. 21, gage height, 3.20 ft (0.975 m); minimum, 1,300 ft^3/s (36.8 m^3/s) Sept. 2, 4, 15, 16.

Period of record: Maximum discharge, 7,530 ft^3/s (213 m^3/s) Dec. 24, 1964, gage height, 6.81 ft (2.076 m); minimum, 1,080 ft^3/s (30.6 m^3/s) Feb. 17, 1932, Oct. 2-31, Nov. 6, 7, 10-14, 1942.

REMARKS.--Records excellent. No regulation. Many small diversions for irrigation above station. Stream is spring fed. Records herein are for measuring site. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1448: 1913.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,600	1,540	1,510	1,670	1,590	1,530	1,450	1,450	1,460	1,430	1,380	1,320
2	1,590	1,590	1,500	1,660	1,590	1,520	1,450	1,460	1,450	1,420	1,380	1,320
3	1,580	1,600	1,490	1,650	1,580	1,520	1,450	1,470	1,440	1,420	1,370	1,330
4	1,580	1,620	1,470	1,610	1,580	1,510	1,450	1,470	1,440	1,430	1,370	1,330
5	1,570	1,580	1,450	1,620	1,580	1,510	1,450	1,460	1,440	1,440	1,380	1,340
6	1,570	1,560	1,460	1,600	1,570	1,510	1,450	1,430	1,460	1,430	1,380	1,340
7	1,570	1,550	1,440	1,570	1,570	1,500	1,450	1,470	1,480	1,410	1,370	1,370
8	1,570	1,540	1,400	1,530	1,560	1,500	1,450	1,480	1,490	1,410	1,370	1,340
9	1,570	1,540	1,400	1,520	1,560	1,500	1,450	1,470	1,480	1,410	1,370	1,330
10	1,570	1,550	1,400	1,520	1,570	1,540	1,450	1,460	1,460	1,410	1,370	1,340
11	1,580	1,540	1,400	1,530	1,560	1,520	1,450	1,450	1,440	1,410	1,370	1,340
12	1,570	1,530	1,400	1,630	1,550	1,510	1,460	1,440	1,450	1,400	1,370	1,340
13	1,580	1,530	1,400	1,970	1,550	1,510	1,480	1,450	1,470	1,400	1,370	1,340
14	1,580	1,530	1,400	1,900	1,540	1,500	1,470	1,490	1,440	1,400	1,380	1,340
15	1,570	1,530	1,400	1,820	1,530	1,490	1,460	1,530	1,420	1,410	1,370	1,330
16	1,560	1,530	1,400	1,860	1,530	1,490	1,480	1,550	1,450	1,410	1,370	1,320
17	1,560	1,520	1,500	1,810	1,540	1,490	1,480	1,560	1,470	1,410	1,360	1,330
18	1,550	1,520	1,700	1,780	1,530	1,490	1,480	1,570	1,450	1,400	1,350	1,340
19	1,550	1,520	2,120	1,750	1,530	1,490	1,480	1,570	1,440	1,420	1,350	1,340
20	1,550	1,510	1,990	1,730	1,520	1,490	1,470	1,530	1,440	1,430	1,350	1,380
21	1,550	1,510	2,740	1,710	1,520	1,480	1,460	1,500	1,450	1,410	1,350	1,370
22	1,540	1,500	2,290	1,690	1,520	1,480	1,470	1,480	1,450	1,390	1,350	1,360
23	1,540	1,500	2,050	1,680	1,520	1,470	1,470	1,490	1,450	1,380	1,350	1,390
24	1,540	1,500	2,020	1,670	1,520	1,470	1,460	1,610	1,450	1,380	1,350	1,450
25	1,540	1,520	1,910	1,660	1,530	1,470	1,460	1,570	1,490	1,380	1,340	1,440
26	1,540	1,670	1,840	1,630	1,530	1,470	1,470	1,500	1,570	1,380	1,330	1,360
27	1,530	1,560	1,830	1,620	1,530	1,460	1,480	1,470	1,510	1,390	1,330	1,340
28	1,550	1,530	1,780	1,620	1,530	1,460	1,460	1,460	1,480	1,390	1,330	1,330
29	1,540	1,520	1,740	1,620	------	1,460	1,450	1,460	1,460	1,390	1,340	1,330
30	1,530	1,510	1,720	1,610	------	1,460	1,450	1,480	1,440	1,380	1,340	1,320
31	1,530	------	1,690	1,610	------	1,460	------	1,480	------	1,380	1,330	------
TOTAL	48,350	46,250	51,840	51,850	43,330	46,260	43,840	46,260	43,820	43,550	42,120	40,450
MEAN	1,560	1,542	1,672	1,673	1,548	1,492	1,461	1,492	1,461	1,405	1,359	1,348
MAX	1,600	1,670	2,740	1,970	1,590	1,540	1,480	1,610	1,570	1,440	1,380	1,450
MIN	1,530	1,500	1,400	1,520	1,520	1,460	1,450	1,430	1,420	1,380	1,330	1,320
AC-FT	95,900	91,740	102,800	102,800	85,950	91,760	86,960	91,760	86,920	86,380	83,550	80,230

CAL YR 1972 TOTAL 670,520 MEAN 1,832 MAX 3,220 MIN 1,400 AC-FT 1,330,000
WTR YR 1973 TOTAL 547,920 MEAN 1,501 MAX 2,740 MIN 1,320 AC-FT 1,087,000

14092100 LAKE BILLY CHINOOK NEAR METOLIUS, OREG.

LOCATION.--Lat 44°36'14", long 121°16'40", in SW¼NE¼ sec.22, T.11 S., R.12 E., Jefferson County, Warm Springs Indian Reservation, near left end of Round Butte Dam on Deschutes River, 5.0 mi (8.0 km) west of Metolius, and at mile 110.6 (178.0 km).

DRAINAGE AREA.--7,490 mi^2 (19,400 km^2), approximately.

PERIOD OF RECORD.--January 1964 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Portland General Electric Co.).

EXTREMES.--Current year: Maximum contents observed, 535,600 acre-ft (659.0 hm^3) Sept. 25, elevation, 1,945.22 ft (592.903 m); minimum contents observed, 450,800 acre-ft (555.00 hm^3) Jan. 17, 18, elevation, 1,922.77 ft (586.060 m).

Period of record: Maximum contents, 538,700 acre-ft (664.0 hm^3) July 15, 16, 1972 elevation, 1,946.00 ft (593.141 m); minimum observed since first filling, 431,100 acre-ft (531.0 hm^3) Feb. 13, 1972, elevation, 1,917.13 ft (584.341 m).

REMARKS.--Reservoir is formed by rockfill dam completed in June 1964 by Portland General Electric Co.; storage began Jan. 2, 1964. Total capacity is 534,700 acre-ft (659.0 hm^3) at elevation 1,945.0 ft (592.84 m) proposed upper limit of operation, and usable capacity is 273,900 acre-ft (337.0 hm^3) between elevations 1,860.0 ft (566.93 m), proposed lower limit of operation, and 1,945.0 ft (592.84 m). Reservoir used for power generation under FPC license 2030. Figures given herein represent total contents.

COOPERATION.--Gage readings and capacity table furnished by Portland General Electric Co.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	1,944.16	531,400	-
Oct. 31	1,942.12	523,400	-8,000
Nov. 30	1,942.93	526,600	+3,200
Dec. 31	1,934.48	494,300	-32,300
CAL YR 1972	-	-	-33,300
Jan. 31	1,926.89	465,700	-28,600
Feb. 28	1,943.64	529,400	+63,700
Mar. 31	1,943.97	530,700	+1,300
Apr. 30	1,944.09	531,100	+400
May 31	1,944.22	531,600	+500
June 30	1,944.63	533,300	+1,700
July 31	1,944.49	532,700	-600
Aug. 31	1,944.30	532,000	-700
Sept.30	1,944.50	532,800	+800
WTR YR 1973	-	-	+1,400

14092500 DESCHUTES RIVER NEAR MADRAS, OREG.

LOCATION.--Lat 44°43'34", long 121°14'45", in SE¼SW¼ sec.1, T.10 S., R.12 E., Jefferson County, on right bank 400 ft (122 m) downstream from reregulating dam, 2.7 mi (4.3 km) downstream from Pelton Dam, 8.5 mi (13.7 km) northwest of Madras, and at mile 100.1 (161.1 km).

DRAINAGE AREA.--7,820 mi^2 (20,250 km^2), approximately.

PERIOD OF RECORD.--October 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,390.25 ft (423.748 m) above mean sea level (levels by Portland General Electric Co.). See WSP 1738 for history of changes prior to Nov. 23, 1957.

AVERAGE DISCHARGE.--50 years, 4,434 ft^3/s (125.6 m^3/s), 3,212,000 acre-ft/yr (3.96 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,660 ft^3/s (274 m^3/s) Jan. 9, gage height, 4.75 ft (1.448 m); minimum, 2,340 ft^3/s (66.3 m^3/s) Dec. 18.

Period of record: Maximum discharge, 15,800 ft^3/s (447 m^3/s) Dec. 28, 1964, gage height, 6.29 ft (1.917 m); maximum gage height, 6.89 ft (2.100 m) Jan. 1, 1943, site and datum then in use; minimum discharge, 1,200 ft^3/s (34.0 m^3/s) Dec. 13, 1957.

REMARKS.--Records excellent. Diurnal fluctuation caused by Lake Simtustus and reregulating reservoir since 1957, combined capacity for normal operation, 6,500 acre-ft (8.01 hm^3). Some winter and spring runoff stored in Ochoco Reservoir, capacity, 47,500 acre-ft (58.6 hm^3), in Crescent Lake, Crane Prairie and Wickiup Reservoirs, combined capacity, 354,600 acre-ft (437 hm^3), and since 1960, in Prineville Reservoir, capacity, 152,800 acre-ft (188 hm^3), and since 1964, in Lake Billy Chinook, capacity, 534,700 acre-ft (659 hm^3). Large diversions in upper basin for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1398: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,790	6,870	5,080	5,020	4,380	5,130	5,260	3,870	4,060	4,020	3,750	3,800
2	4,710	6,390	5,100	4,970	4,400	5,150	5,080	3,850	4,040	3,940	3,800	3,800
3	4,840	5,630	5,380	5,350	4,450	5,180	4,870	3,870	3,990	3,920	3,750	3,780
4	4,710	4,950	7,200	6,020	4,350	5,080	4,740	3,870	3,990	3,920	3,780	3,780
5	4,740	4,480	7,230	6,190	4,380	4,820	4,710	3,850	3,940	3,920	3,780	3,800
6	4,560	4,450	7,170	6,630	4,350	4,760	4,610	4,020	3,940	3,900	3,800	3,800
7	4,530	4,920	7,020	7,820	4,430	4,630	4,610	4,140	3,870	3,900	3,820	3,800
8	4,530	5,740	6,780	8,990	5,130	4,560	4,580	4,110	3,750	3,850	3,750	3,820
9	4,500	5,740	6,630	9,300	5,080	4,610	4,450	3,970	3,780	3,800	3,800	3,800
10	4,530	5,490	6,390	8,890	5,130	4,630	4,350	3,940	3,920	3,800	3,780	3,820
11	4,380	5,430	5,740	8,360	5,080	4,610	4,040	3,970	4,020	3,730	3,780	3,870
12	4,430	5,490	5,710	7,950	4,380	4,610	3,850	4,020	4,060	3,750	3,750	3,750
13	4,610	5,490	5,490	6,510	4,040	4,660	3,850	3,990	4,090	3,750	3,780	3,750
14	5,020	5,180	4,500	5,680	3,590	4,610	3,820	4,060	3,990	3,700	3,820	3,800
15	5,180	4,690	3,990	5,630	3,590	4,580	3,900	4,110	3,920	3,730	3,900	3,800
16	5,240	4,710	4,300	5,630	3,640	4,580	3,870	3,940	3,850	3,680	3,850	3,820
17	5,240	5,050	3,660	5,660	3,640	4,530	3,900	3,900	3,870	3,750	3,800	3,800
18	5,210	5,320	3,000	5,350	3,640	4,500	3,870	3,920	3,900	3,870	3,800	3,800
19	5,350	5,260	3,590	5,130	3,660	4,530	3,920	3,900	3,750	3,940	3,800	3,820
20	5,880	5,290	3,900	5,130	3,660	4,480	3,850	3,920	3,680	3,900	3,800	3,780
21	6,050	5,210	3,900	5,460	3,500	4,500	3,850	4,060	3,850	3,870	3,820	3,800
22	6,100	5,050	3,900	5,660	3,390	4,450	3,850	4,140	3,870	3,820	3,850	3,940
23	5,320	5,000	3,900	5,800	3,420	4,450	3,820	4,140	3,900	3,820	3,800	4,040
24	5,180	5,050	4,260	5,770	3,390	4,380	3,800	4,160	3,870	3,820	3,800	4,020
25	5,210	4,970	4,280	5,600	3,460	4,710	3,900	4,160	3,920	3,750	3,780	4,020
26	5,210	4,530	3,850	5,660	3,700	5,150	3,820	4,140	3,920	3,750	3,780	4,040
27	5,180	4,710	4,160	5,630	4,210	5,130	3,820	4,160	3,920	3,730	3,800	4,060
28	5,260	4,870	4,920	5,260	4,660	5,130	3,850	4,140	3,970	3,800	3,820	4,090
29	5,240	5,020	5,350	4,690	------	5,130	3,900	4,060	3,990	3,800	3,820	4,060
30	5,710	5,080	5,320	4,430	------	5,210	3,920	4,060	4,020	3,750	3,820	4,040
31	6,570	------	5,380	4,350	------	5,260	------	4,060	------	3,750	3,820	------
TOTAL	158,010	156,060	157,080	188,520	114,730	147,740	124,660	124,500	117,640	118,430	117,800	116,100
MEAN	5,097	5,202	5,067	6,081	4,098	4,766	4,155	4,016	3,921	3,820	3,800	3,870
MAX	6,570	6,870	7,230	9,300	5,130	5,260	5,260	4,160	4,090	4,020	3,900	4,090
MIN	4,380	4,450	3,000	4,350	3,390	4,380	3,800	3,850	3,680	3,680	3,750	3,750
AC-FT	313,400	309,500	311,600	373,900	227,600	293,000	247,300	246,900	233,300	234,900	233,700	230,300

CAL YR 1972 TOTAL 1,993,200 MEAN 5,446 MAX 12,100 MIN 3,000 AC-FT 3,954,000
WTR YR 1973 TOTAL 1,641,270 MEAN 4,497 MAX 9,300 MIN 3,000 AC-FT 3,255,000

14093000 SHITIKE CREEK NEAR WARM SPRINGS, OREG.

LOCATION.--Lat 44°45'41", long 121°13'57", in NW¼NW¼ sec.30, T.9 S., R.13 E., Jefferson County, Warm Springs Indian Reservation, on left bank 1.9 mi (3.1 km) east of Warm Springs and at mile 0.3 (0.5 km).

DRAINAGE AREA.--105 mi^2 (272 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 1,380 ft (421 m), from topographic map.

EXTREMES.--Current year: Maximum daily discharge, 690 ft^3/s (19.5 m^3/s) Dec. 21; minimum daily, 20 ft^3/s (0.57 m^3/s) Dec. 8-15.

REMARKS.--Records fair. No regulation. Some water is diverted for mill pond at point 0.3 mi (0.5 km) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	57	57	100	75	71	60	67	75	64	38	35
2	64	90	57	91	75	71	57	67	75	64	35	38
3	64	76	59	86	71	67	57	67	75	57	38	35
4	64	102	37	78	71	67	57	75	71	60	41	33
5	61	85	37	82	71	67	57	71	71	60	41	33
6	59	76	37	71	67	67	57	71	78	57	41	33
7	59	71	30	60	67	67	60	71	88	53	38	35
8	59	66	20	44	67	64	60	71	91	50	38	41
9	59	61	20	67	64	64	60	71	86	47	38	35
10	61	68	20	75	67	67	60	71	82	50	38	35
11	68	66	20	86	64	71	60	67	60	50	38	33
12	64	64	20	158	64	67	64	71	67	47	38	33
13	66	61	20	500	64	67	64	78	75	44	38	33
14	66	61	20	450	64	64	64	86	71	47	35	33
15	66	57	20	248	60	64	71	105	75	47	35	33
16	59	61	54	216	64	64	75	152	75	44	38	33
17	61	61	126	182	60	64	78	122	78	44	38	33
18	57	59	215	158	64	64	78	116	60	44	35	33
19	57	57	495	140	64	60	71	128	64	47	35	35
20	54	57	470	128	64	60	71	105	67	50	35	38
21	57	52	690	122	60	64	71	78	71	47	35	41
22	57	57	625	110	57	57	71	78	71	47	35	53
23	52	52	376	105	60	62	67	82	75	44	35	60
24	52	52	280	100	60	64	67	128	75	44	41	78
25	52	61	224	96	60	64	67	116	75	41	41	105
26	57	150	170	78	62	64	67	100	82	41	44	57
27	52	80	164	86	64	60	75	75	91	41	44	52
28	52	71	140	82	67	60	78	71	71	41	41	44
29	57	66	128	82	------	64	78	71	64	41	38	44
30	57	61	116	82	------	67	71	71	64	41	35	41
31	52	------	110	78	------	64	------	71	------	41	35	------
TOTAL	1,831	2,058	4,857	4,041	1,817	2,007	1,993	2,673	2,223	1,495	1,175	1,265
MEAN	59.1	68.6	157	130	64.9	64.7	66.4	86.2	74.1	48.2	37.9	42.2
MAX	68	150	690	500	75	71	78	152	91	64	44	105
MIN	52	52	20	44	57	57	57	67	60	41	35	33
AC-FT	3,630	4,080	9,630	8,020	3,600	3,980	3,950	5,300	4,410	2,970	2,330	2,510

WTR YR 1973 TOTAL 27,435 MEAN 75.2 MAX 690 MIN 20 AC-FT 54,420

14097100 WARM SPRINGS RIVER NEAR KAHNEETA HOT SPRINGS, OREG.

LOCATION.--Lat 44°51'24", long 121°08'55", in SE¼SW¼ sec.23, T.8 S., R.13 E., Wasco County, Warm Springs Indian Reservation, on right bank at mile 4.6 (7.4 km).

DRAINAGE AREA.--526 mi² (1,362 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,560 ft³/s (44.2 m³/s) Dec. 21, gage height, 3.81 ft (1.161 m); minimum, 227 ft³/s (6.43 m³/s) Aug. 15, 16, Sept. 6.

REMARKS.--Records excellent. No regulation. Diversions above station.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	317	317	416	370	377	333	330	276	253	234	232
2	319	331	317	414	373	377	326	327	277	252	232	231
3	317	336	318	398	368	366	325	325	278	252	232	232
4	315	348	306	354	369	366	320	327	276	250	233	231
5	314	352	302	377	372	363	324	330	279	249	234	231
6	317	338	300	359	364	361	329	325	273	248	237	230
7	317	332	295	340	354	359	320	325	271	250	237	236
8	317	326	290	340	350	358	320	331	268	249	234	238
9	317	324	290	335	348	357	321	335	265	246	234	235
10	318	327	285	330	353	372	321	331	266	244	235	234
11	324	331	285	330	347	394	324	327	264	242	234	232
12	325	326	285	344	350	378	331	319	268	241	232	231
13	326	326	280	672	349	375	369	314	268	241	233	231
14	323	326	280	958	343	370	343	311	265	241	231	231
15	322	323	280	774	340	363	343	312	265	240	230	231
16	320	323	280	753	345	362	344	314	266	238	230	231
17	319	324	280	683	361	366	362	311	283	237	231	232
18	317	321	450	604	353	361	359	308	285	237	231	239
19	320	319	830	578	341	360	356	305	276	243	231	239
20	319	317	907	524	341	357	352	300	271	247	232	246
21	318	315	1.220	501	337	354	343	301	267	249	231	245
22	314	314	1.360	450	335	348	337	299	266	241	231	252
23	313	314	991	456	335	334	338	297	265	238	231	259
24	312	314	836	453	336	336	338	301	265	238	234	258
25	313	315	753	439	345	340	334	306	265	237	240	264
26	316	335	632	389	363	340	334	306	265	237	237	249
27	317	332	577	391	367	340	340	300	261	237	234	241
28	321	324	548	399	367	338	335	297	257	244	233	238
29	319	321	492	378	------	329	335	291	254	238	234	238
30	316	319	463	388	------	334	333	287	253	237	234	236
31	314	------	441	385	------	338	------	283	------	234	233	------
TOTAL	9.858	9.770	15.490	14.512	9.876	11.073	10.089	9.675	8.058	7.530	7.229	7.153
MEAN	318	326	500	468	353	357	336	312	269	243	233	238
MAX	326	352	1.360	958	373	394	369	335	285	253	240	264
MIN	312	314	280	330	335	329	320	283	253	234	230	230
CFSM	.60	.62	.95	.89	.67	.68	.64	.59	.51	.46	.44	.45
IN.	.70	.69	1.10	1.03	.70	.78	.71	.68	.57	.53	.51	.51
AC-FT	19.550	19.380	30.720	28.780	19.590	21.960	20.010	19.190	15.980	14.940	14.340	14.190

WTR YR 1973 TOTAL 120.313 MEAN 330 MAX 1.360 MIN 230 CFSM .63 IN 8.51 AC-FT 238.600

PEAK DISCHARGE (BASE, 1,700 CFS).--No peak above base.

14097200 WHITE RIVER NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°10'40", long 121°34'30", in NE¼SW¼ sec.32, T.4 S., R.10 E., Wasco County, in Mount Hood National Forest, on left bank at Faith Spring, 1.4 mi (2.3 km) above Klip Creek, and at mile 33.3 (53.6 km).

DRAINAGE AREA.--40.7 mi^2 (105.4 km^2).

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,740 ft (835 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,510 ft^3/s (42.8 m^3/s) Dec. 21, gage height, 5.10 ft (1.554 m), from floodmark in well; minimum, 39 ft^3/s (1.10 m^3/s) Aug. 18.

Period of record: Maximum discharge, 2,040 ft^3/s (57.8 m^3/s) Jan. 23, 1970, gage height, 5.24 ft (1.597 m); minimum, 39 ft^3/s (1.10 m^3/s) Aug. 18, 1973.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WRD Oreg. 1972: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	59	78	159	111	107	90	140	88	61	49	52
2	61	78	83	153	109	105	86	140	86	61	46	50
3	59	78	75	140	107	103	88	145	84	61	45	49
4	57	88	63	131	105	101	94	145	82	64	44	48
5	57	85	62	131	101	99	107	140	81	65	45	48
6	57	71	59	116	99	96	111	140	79	64	48	46
7	57	67	57	107	94	96	107	138	79	61	44	52
8	57	65	55	111	92	96	109	143	79	60	43	46
9	57	63	54	159	90	101	114	138	77	60	43	49
10	57	67	52	197	92	133	126	135	73	60	43	52
11	55	63	51	211	88	119	135	128	70	60	44	55
12	51	59	50	258	86	114	143	128	72	58	44	54
13	51	59	49	406	84	111	151	135	72	60	46	55
14	51	57	48	368	82	105	148	148	72	63	45	60
15	51	55	48	307	81	105	145	159	77	64	44	64
16	50	55	54	292	81	107	176	156	79	63	43	61
17	50	53	63	262	88	103	173	145	88	60	43	63
18	50	53	63	241	82	101	162	140	82	61	41	67
19	50	53	270	221	79	99	151	133	73	63	41	68
20	50	51	550	201	77	94	140	131	68	61	41	77
21	50	51	990	181	77	92	140	119	67	60	41	72
22	51	50	479	167	77	92	165	114	67	55	41	65
23	51	51	406	156	75	90	162	114	68	54	44	61
24	50	50	368	148	77	92	153	121	65	54	57	77
25	50	118	307	140	94	94	156	114	75	54	49	77
26	55	220	265	128	96	94	165	105	84	54	49	50
27	51	118	262	131	99	92	170	101	77	55	49	46
28	53	100	231	126	99	90	156	96	70	55	51	45
29	50	90	204	123	------	90	151	92	68	52	51	45
30	51	83	187	121	------	92	145	92	65	50	57	44
31	51	------	170	116	------	92	------	90	------	49	57	------
TOTAL	1,654	2,210	5,753	5,708	2,522	3,105	4,119	3,965	2,267	1,822	1,428	1,698
MEAN	53.4	73.7	186	184	90.1	100	137	128	75.6	58.8	46.1	56.6
MAX	63	220	990	406	111	133	176	159	88	65	57	77
MIN	50	50	48	107	75	90	86	90	65	49	41	44
CFSM	1.31	1.81	4.57	4.52	2.21	2.46	3.37	3.15	1.86	1.44	1.13	1.39
IN.	1.51	2.02	5.26	5.22	2.31	2.84	3.76	3.62	2.07	1.67	1.31	1.55
AC-FT	3,280	4,380	11,410	11,320	5,000	6,160	8,170	7,860	4,500	3,610	2,830	3,370

CAL YR 1972 TOTAL 81,311 MEAN 222 MAX 990 MIN 48 CFSM 5.45 IN 74.32 AC-FT 161,300
WTR YR 1973 TOTAL 36,251 MEAN 99.3 MAX 990 MIN 41 CFSM 2.44 IN 33.13 AC-FT 71,900

PEAK DISCHARGE (BASE, 600 CFS).--Dec. 21 (time unknown) 1,510 cfs (5.10 ft).

NOTE.--No gage-height record Dec. 19-21.

14097300 CLEAR LAKE NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°10'35", long 121°41'40", in NE¼SW¼ sec.32, T.4 S., R.9 E., Wasco County, Mount Hood National Forest, in control works shaft on Wasco dam on Clear Creek, 9.4 mi (15.1 km) southeast of Government Camp, 14.6 mi (23.5 km) northwest of Warm Springs, and at mile 12.1 (19.5 km).

DRAINAGE AREA.--8.31 mi^2 (21.52 km^2).

PERIOD OF RECORD.--May 1968 to August 1973 (discontinued).

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 8,540 acre-ft (10.5 hm^3) Oct. 12, elevation, 3,505.8 ft (1,068.57 m); minimum observed, 2,470 acre-ft (3.05 hm^3) Aug. 3, elevation, 3,491.8 ft (1,064.30 m).

Period of record: Maximum contents observed, 13,940 acre-ft (17.2 hm^3) June 6, 1972, elevation, 3,516.0 ft (1,071.68 m); minimum observed, 1,190 acre-ft (1.47 hm^3) July 29, 1968, elevation, 3,488.0 ft (1,063.14 m).

REMARKS.--The dam is a zoned earthfilled structure built by the Bureau of Reclamation. Usable storage began Dec. 1, 1959. Capacity, 13,040 acre-ft (16.1 hm^3) at elevation 3,514.4 ft (1,071.19 m). Dead storage below elevation 3,480.0 ft (1,060.70 m) in old natural Clear Lake is unknown. Inactive storage between elevations 3,480.0 ft (1,060.70 m) and 3,488.0 ft (1,063.14 m) is 1,190 acre-ft (1.47 hm^3). Active storage is 11,850 acre-ft (14.6 hm^3) between elevations 3,488.0 ft (1,063.14 m) and 3,514.4 ft (1,071.19 m).

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)
Sept. 30	a3,504.8	8,070
Oct. 12	3,505.80	8,540
Nov. 8	3,505.26	8,290
Nov. 29	3,504.90	8,120
Dec. 20	3,504.80	8,070
CAL YR 1972	-	-
Feb. 21	3,505.63	8,460
Apr. 25	3,504.60	7,970
June 11	3,500.44	6,050
Aug. 3	3,491.80	2,470
WTR YR 1973	-	-

a Interpolated.

14097400 CLEAR CREEK BELOW CLEAR LAKE, NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°10'35", long 121°41'35", in NW¼SE¼ sec.32, T.4 S., R.9 E., Wasco County, in Mount Hood National Forest, on left bank 250 ft (76 m) downstream from Wasco Dam, 9.5 mi (15.3 km) southeast of Government Camp, and at mile 12.05 (19.39 km).

DRAINAGE AREA.--8.32 mi^2 (21.55 km^2).

PERIOD OF RECORD.--June 1968 to August 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 3,477.64 ft (1,059.985 m) above mean sea level (levels by U.S. Bureau of Reclamation).

EXTREMES.--Current year: Maximum discharge recorded, 49 ft^3/s (1.39 m^3/s) July 19, gage height, 1.15 ft (0.351 m); minimum recorded, 0.91 ft^3/s (0.026 m^3/s) on many days during the year.

Period of record: Maximum discharge recorded, 49 ft^3/s (1.39 m^3/s) July 19, 1973, gage height, 1.15 ft (0.351 m); minimum, 0.78 ft^3/s (0.022 m^3/s) Sept. 6-13, 21-30, Oct. 1 to Nov. 7, 1968, Oct. 25 to Nov. 14, 1970.

REMARKS.--Records good. Flow regulated since May 1968 by Clear Lake (see sta 14097300). No diversions.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.2	.91	.91	1.0	1.2	1.2	13	20	28	37	
2	1.8	1.2	.91	.91	1.0	1.2	1.2	13	15	28	37	
3	1.8	1.2	.91	1.0	1.0	1.2	1.2	13	15	31	37	
4	1.8	1.0	.91	1.0	1.0	1.2	1.2	13	12	34	36	
5	1.8	1.0	.91	1.0	1.0	1.2	1.2	13	5.4	34	35	
6	1.8	1.0	.91	1.0	1.0	1.2	1.2	13	16	34	35	
7	1.7	1.0	.91	1.0	1.0	1.2	1.2	13	20	34	34	
8	1.7	1.0	.91	1.0	1.0	1.2	8.2	13	20	34	34	
9	1.7	1.0	.91	1.0	1.0	1.2	11	13	16	34	34	
10	1.7	1.0	.91	1.0	1.0	1.3	19	13	8.2	33	33	
11	1.7	1.0	.91	1.0	1.0	1.2	19	16	5.7	32	32	
12	1.5	1.0	.91	1.2	1.0	1.2	14	20	10	32	32	
13	1.3	1.0	.91	1.0	1.0	1.2	14	20	22	32	32	
14	1.3	1.0	.91	1.0	1.0	1.2	14	20	22	32	32	
15	1.3	1.0	.91	1.0	1.0	1.2	14	20	22	32	31	
16	1.3	1.0	.91	1.0	1.0	1.2	14	20	21	34	29	
17	1.3	1.0	1.0	1.0	1.2	1.2	14	20	18	33	26	
18	1.3	1.0	1.0	1.0	1.2	1.2	14	20	18	33	26	
19	1.2	1.0	.91	1.0	1.2	1.2	14	20	18	37	26	
20	1.2	1.0	.91	1.0	1.2	1.2	14	21	18	46	26	
21	1.2	1.0	1.0	1.0	1.2	1.2	14	31	18	46	26	
22	1.2	1.0	.91	1.0	1.2	1.2	13	34	19	46	26	
23	1.2	1.0	.91	1.0	1.2	1.2	13	34	23	45	26	
24	1.3	1.0	.91	1.0	1.2	1.2	13	34	23	45	26	
25	1.3	1.0	.91	1.0	1.2	1.2	13	34	23	45	17	
26	1.2	1.0	1.0	1.0	1.2	1.2	13	33	23	44	1.7	
27	1.2	1.0	1.0	1.0	1.2	1.2	13	33	23	41	1.5	
28	1.2	1.0	.91	1.0	1.2	1.2	13	33	23	38	8.6	
29	1.2	.91	1.0	1.0	------	1.2	13	32	26	37	29	
30	1.2	.91	.91	1.0	------	1.2	13	30	28	37	29	
31	1.2	------	1.0	1.0	------	1.2	------	26	------	37	29	------
TOTAL	44.4	30.42	28.86	31.02	30.4	37.3	322.6	681	551.3	1,128	863.8	
MEAN	1.43	1.01	.93	1.00	1.09	1.20	10.8	22.0	18.4	36.4	27.9	
MAX	1.8	1.2	1.0	1.2	1.2	1.3	19	34	28	46	37	
MIN	1.2	.91	.91	.91	1.0	1.2	1.2	13	5.4	28	1.5	
AC-FT	88	60	57	62	60	74	640	1,350	1,090	2,240	1,710	

CAL YR 1972 TOTAL 3,855.06 MEAN 10.5 MAX 43 MIN .91 AC-FT 7,650

14098100 CLEAR CREEK DITCH NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°08'45", long 121°37'50", in SW¼SE¼ sec.11, T.5 S., R.9 E., Wasco County, in Mount Hood National Forest, on left bank 32 ft (10 m) downstream from U.S. Highway 26, 1.4 mi (2.3 km) downstream from diversion dam on Clear Creek, and 12 mi (19 km) southeast of Government Camp.

PERIOD OF RECORD.--June 1968 to August 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 3,244 ft (989 m) above mean sea level (levels by U.S. Bureau of Public Roads).

EXTREMES.--Period of record: Maximum daily discharge, [illegible] ft³/s (1.98 m³/s) May 16, 17, 1972; no flow Nov. 22-24, 1969, Nov. 24 to Dec. 3, 1972.

REMARKS.--Records good. Canal diverts from Clear Creek in NW¼SE¼ sec.10, T.5 S., R.9 E., for irrigation of lands in the Juniper Flats area to the east. Flow is also supplemented by diversion from Frog Creek in NE¼NE¼ sec.34, T.4 S., R.9 E.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	14	0	11	12	9.9	23	40	41	43	49	
2	21	14	0	11	12	9.7	23	39	33	42	49	
3	21	14	0	10	11	9.7	23	39	32	43	49	
4	20	14	1.1	10	11	9.7	23	39	32	47	48	
5	20	14	3.5	10	11	9.7	25	38	24	47	48	
6	20	14	6.8	8.8	11	9.7	26	38	27	47	48	
7	20	14	11	8.6	11	9.7	26	37	36	47	47	
8	20	14	11	8.6	11	9.6	28	38	36	47	46	
9	20	13	11	8.8	11	9.7	34	37	35	46	46	
10	20	14	11	11	11	10	35	37	26	46	45	
11	20	14	11	14	10	10	42	37	23	46	45	
12	19	14	11	14	10	10	40	42	23	46	44	
13	14	14	11	14	10	10	40	42	36	45	44	
14	14	13	11	14	10	10	41	41	37	45	43	
15	14	13	13	14	10	10	40	41	37	45	43	
16	14	13	13	14	9.8	10	44	40	38	47	42	
17	14	13	14	13	9.8	10	43	40	37	46	36	
18	14	13	14	13	9.7	10	43	40	35	46	36	
19	14	13	15	14	9.7	10	42	39	34	47	35	
20	14	13	16	14	9.5	10	42	40	33	56	35	
21	14	13	17	14	9.5	10	42	49	33	56	35	
22	14	13	17	13	9.5	9.9	44	54	33	56	34	
23	14	5.6	16	13	9.5	9.9	44	54	36	56	34	
24	14	0	15	13	9.4	9.9	43	55	36	56	36	
25	14	0	14	13	9.7	10	43	54	36	56	34	
26	14	0	13	13	9.8	10	42	54	36	56	15	
27	14	0	13	13	9.8	10	42	53	35	55	13	
28	14	0	12	13	9.7	15	41	53	35	51	13	
29	14	0	12	12	------	21	41	52	37	50	34	
30	13	0	12	12	------	23	40	51	43	50	36	
31	13	------	11	12	------	23	------	45	------	50	36	------
TOTAL	506	303.6	336.4	376.8	287.4	349.1	1,105	1,358	1,015	1,516	1,198	
MEAN	16.3	10.1	10.9	12.2	10.3	11.3	36.8	43.8	33.8	48.9	38.6	
MAX	21	14	17	14	12	23	44	55	43	56	49	
MIN	13	0	0	8.6	9.4	9.6	23	37	23	42	13	
AC-FT	1,000	602	667	747	570	692	2,190	2,690	2,010	3,010	2,380	

CAL YR 1972 TOTAL 10,656.8 MEAN 29.1 MAX 70 MIN 0 AC-FT 21,140

14098600 CLEAR CREEK NEAR PINE GROVE, OREG.

LOCATION.--Lat 45°08'50", long 121°34'30", in SW¼ sec.8, T.5 S., R.10 E., Wasco County, in Mount Hood National Forest, on left bank 400 ft (122 m) downstream from Frog Creek and 9.5 mi (15.3 km) northwest of Pine Grove.

DRAINAGE AREA.--38.3 mi^2 (99.2 km^2).

PERIOD OF RECORD.--July 1967 to August 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (900 m), from topographic map.

AVERAGE DISCHARGE.--5 years (1967-72), 57.0 ft^3/s (1.61 m^3/s), 41,300 acre-ft (50.9 hm^3/yr).

EXTREMES.--Maximum discharge during period October 1972 to August 1973, 177 ft^3/s (5.01 m^3/s) Dec. 21, gage height, 3.99 ft (1.216 m); minimum, 17 ft^3/s (0.48 m^3/s) Aug. 20-22.

Period of record: Maximum discharge, 382 ft^3/s (10.8 m^3/s) Jan. 23, 1970, gage height, 5.01 ft (1.527 m); minimum, 14 ft^3/s (0.40 m^3/s) Sept. 6, 7, 21-29, 1967, Sept. 28, 1968.

REMARKS.--Records excellent. Some regulation since May 1968 by Clear Lake (see station 14097300). Large diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	26	37	57	48	42	32	30	26	22	20	
2	21	29	37	57	47	42	31	30	25	22	20	
3	21	31	36	53	47	41	31	30	24	22	20	
4	21	33	32	51	47	41	32	30	23	22	20	
5	20	32	29	52	46	41	33	29	23	23	20	
6	20	28	28	46	44	41	32	29	22	23	20	
7	21	27	26	47	46	40	32	29	22	23	19	
8	21	26	25	50	43	40	32	29	22	23	19	
9	21	26	25	50	42	41	33	29	22	22	19	
10	21	27	24	47	43	49	34	28	22	22	19	
11	21	27	25	47	42	48	40	28	22	22	19	
12	21	25	24	59	41	47	34	27	22	22	19	
13	26	26	24	91	40	47	33	27	22	22	19	
14	26	26	24	84	40	45	33	27	22	22	18	
15	26	25	24	75	39	45	33	27	22	21	18	
16	26	25	24	76	39	46	34	27	23	21	18	
17	26	25	26	71	40	46	34	26	25	21	18	
18	26	25	30	69	39	45	34	26	23	21	18	
19	26	25	73	66	38	45	35	26	22	21	18	
20	26	24	71	64	37	44	34	26	22	23	18	
21	25	24	155	62	37	44	34	26	22	24	18	
22	25	23	121	59	37	44	35	27	22	24	18	
23	25	28	104	58	37	43	35	28	22	24	18	
24	25	36	99	58	37	44	34	29	22	24	18	
25	25	41	92	56	40	44	34	29	22	23	18	
26	26	55	81	53	41	44	33	29	22	23	18	
27	26	40	81	53	41	44	32	28	22	23	18	
28	27	38	74	52	41	41	32	28	21	22	18	
29	26	37	67	51	------	35	31	28	21	21	18	
30	25	36	63	51	------	32	31	27	22	21	18	
31	25	------	60	50	------	33	------	27	------	21	18	------
TOTAL	738	896	1,641	1,815	1,159	1,324	997	866	674	690	577	
MEAN	23.8	29.9	52.9	58.5	41.4	42.7	33.2	27.9	22.5	22.3	18.6	
MAX	27	55	155	91	48	49	40	30	26	24	20	
MIN	20	23	24	46	37	32	31	26	21	21	18	
AC-FT	1,460	1,780	3,250	3,600	2,300	2,630	1,980	1,720	1,340	1,370	1,140	

CAL YR 1972 TOTAL 29,455 MEAN 80.5 MAX 299 MIN 20 AC-FT 58,420

14101500 WHITE RIVER BELOW TYGH VALLEY, OREG.

LOCATION.--Lat 45°14'30", long 121°05'38", in NE¼NE¼ sec.7, T.4 S., R.14 E., Wasco County, on left bank 200 ft (61 m) downstream from former Pacific Power & Light Co. powerplant at White River Falls, 3.9 mi (6.3 km) east of town of Tygh Valley, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--368 mi^2 (953 km^2).

PERIOD OF RECORD.--October 1917 to current year.

GAGE.--Water-stage recorder. Datum of gage is 870.15 ft (265.222 m) above mean sea level (levels by Pacific Power & Light Co.). Prior to July 28, 1931, at site 750 ft (229 m) downstream at different datum. July 28, 1931, to Sept. 30, 1954, at site 700 ft (213 m) downstream at different datums.

AVERAGE DISCHARGE.--56 years, 427 ft^3/s (12.1 m^3/s), 309,400 acre-ft/yr (381 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,830 ft^3/s (80.1 m^3/s) Dec. 21, gage height, 5.77 ft (1.759 m); minimum, 83 ft^3/s (2.35 m^3/s) Sept. 4, 17.

Period of record: Maximum discharge, 13,300 ft^3/s (377 m^3/s) Jan. 6, 1923, gage height, about 13.3 ft (4.05 m), site and datum then in use, from rating curve extended above 5,000 ft^3/s (142 m^3/s); minimum, 7.5 ft^3/s (0.21 m^3/s) Aug. 31, 1961; minimum daily, 71 ft^3/s (2.01 m^3/s) Aug. 31, 1941.

REMARKS.--Records good. No regulation. Diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1448: 1920, 1923, 1927-28, drainage area. WSP 1935: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	145	187	420	312	293	201	234	167	128	107	94
2	146	175	188	416	300	292	195	238	170	123	107	90
3	141	181	186	388	297	288	187	238	165	121	113	87
4	136	200	169	332	293	285	190	245	160	121	109	85
5	133	203	142	352	286	281	205	241	154	123	109	90
6	130	177	131	308	279	276	214	231	149	121	115	88
7	130	167	130	286	265	272	205	231	147	123	105	92
8	130	162	130	251	258	269	197	231	147	121	99	94
9	130	157	129	258	255	271	198	231	144	119	97	90
10	131	163	129	308	258	312	199	225	139	119	97	92
11	141	163	130	324	251	325	211	228	137	119	97	94
12	140	157	132	425	248	304	219	218	133	115	97	88
13	142	154	134	1,140	248	303	226	221	133	115	101	87
14	145	152	138	1,240	248	291	228	234	130	115	101	87
15	142	149	143	936	245	282	222	241	137	117	99	87
16	140	149	154	901	251	283	241	245	135	121	97	85
17	140	149	253	810	262	283	265	231	149	123	99	83
18	138	148	583	708	255	273	248	225	152	115	96	85
19	137	149	763	642	245	269	245	215	135	117	94	87
20	137	145	762	560	238	262	248	205	126	121	94	96
21	136	142	2,180	520	234	255	238	199	121	121	90	96
22	137	141	1,460	470	231	247	248	196	123	117	92	107
23	135	139	1,130	450	231	241	269	196	128	117	90	115
24	132	151	1,060	430	234	240	258	209	128	111	103	130
25	132	157	936	416	248	238	238	218	130	111	107	167
26	141	428	756	368	269	239	238	209	147	113	94	123
27	146	273	714	368	276	235	255	199	144	117	90	109
28	146	226	642	356	279	229	245	199	135	117	88	111
29	145	209	550	340	------	209	241	190	130	113	92	111
30	143	194	505	340	------	203	241	185	128	109	97	115
31	142	------	465	332	------	205	------	176	------	105	97	------
TOTAL	4,294	5,305	15,111	15,395	7,296	8,255	6,815	6,784	4,223	3,648	3,073	2,965
MEAN	139	177	487	497	261	266	227	219	141	118	99.1	98.8
MAX	150	428	2,180	1,240	312	325	269	245	170	128	115	167
MIN	130	139	129	251	231	203	187	176	121	105	88	83
AC-FT	8,520	10,520	29,970	30,540	14,470	16,370	13,520	13,460	8,380	7,240	6,100	5,880

CAL YR 1972 TOTAL 215,252 MEAN 588 MAX 4,810 MIN 129 AC-FT 427,000
WTR YR 1973 TOTAL 83,164 MEAN 228 MAX 2,180 MIN 83 AC-FT 165,000

PEAK DISCHARGE (BASE, 1,200 CFS).--Dec. 21 (1100) 2,830 cfs (5.77 ft); Jan. 13 (2130) 1,690 cfs (4.52 ft).

DESCHUTES RIVER BASIN

14103000 DESCHUTES RIVER AT MOODY, NEAR BIGGS, OREG.

LOCATION.--Lat 45°37'20", long 120°54'05", in SE¼ sec.26, T.2 N., R.15 E., Sherman County, on right bank at Moody, 4.0 mi (6.4 km) southwest of Biggs, and at mile 1.4 (2.3 km).

DRAINAGE AREA.--10,500 mi^2 (27,200 km^2), approximately.

PERIOD OF RECORD.--October 1897 to December 1899 (published as "near Moro"), July 1906 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 167.54 ft (51.066 m) above mean sea level. Oct. 19, 1897, to Dec. 31, 1899, nonrecording gage at site 10 mi (16 km) upstream at different datum. July 22, 1906, to July 18, 1930, nonrecording gage at site 300 ft (91 m) downstream at datum 0.50 ft (0.152 m) lower.

AVERAGE DISCHARGE.--69 years, 5,802 ft^3/s (164.3 m^3/s), 4,204,000 acre-ft/yr (5.18 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft^3/s (295 m^3/s) Jan. 10, gage height, 4.20 ft (1.280 m), from graph based on gage readings; minimum, 3,880 ft^3/s (110 m^3/s) June 20.
Period of record: Maximum discharge, 75,500 ft^3/s (2,140 m^3/s) Dec. 22, 1964, gage height, 11.80 ft (3.597 m), from rating curve extended above 47,000 ft^3/s (1,330 m^3/s); minimum, 2,400 ft^3/s (68.0 m^3/s) Dec. 5, 1957.

REMARKS.--Records good. Some fluctuation caused by regulation at Lake Simtustus since 1957. Some winter and spring runoff stored in Ochoco Reservoir, capacity, 46,420 acre-ft (57.2 hm^3), in Crescent Lake, Crane Prairie and Wickiup Reservoirs, combined capacity, 323,390 acre-ft (399 hm^3), and since 1960, in Prineville Reservoir (see station 14080400), and since 1964 in Lake Billy Chinook (see station 14092100). Large diversions in upper river basin for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 754: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,340	7,490	5,650	6,350	5,120	5,580	5,910	4,520	4,580	4,400	4,030	4,090
2	5,370	7,490	5,620	6,250	5,250	6,050	5,870	4,490	4,560	4,400	4,040	4,070
3	5,280	6,830	5,650	6,280	5,280	6,080	5,640	4,470	4,530	4,310	4,110	4,090
4	5,380	6,050	6,500	6,390	5,280	6,060	5,360	4,490	4,530	4,310	4,030	4,030
5	5,250	5,370	8,170	7,000	5,380	6,010	5,370	4,520	4,470	4,280	4,100	4,040
6	5,200	5,090	9,300	7,340	5,310	5,540	5,290	4,480	4,430	4,310	4,100	4,060
7	5,060	5,010	9,580	7,870	5,280	5,470	5,240	4,690	4,420	4,230	4,100	4,080
8	5,060	5,650	9,460	8,920	5,250	5,310	5,240	4,780	4,320	4,260	4,100	4,110
9	5,010	6,620	9,330	9,840	5,770	5,300	5,130	4,710	4,210	4,200	4,050	4,130
10	4,980	6,150	9,420	10,300	5,880	5,340	5,080	4,600	4,210	4,180	4,110	4,090
11	5,050	6,070	8,830	9,880	5,840	5,440	4,910	4,560	4,430	4,090	4,090	4,140
12	4,960	6,030	8,530	9,460	5,710	5,420	4,540	4,550	4,480	4,080	4,070	4,120
13	5,000	6,080	8,760	9,390	5,120	5,410	4,520	4,560	4,530	4,100	4,030	4,010
14	5,240	6,000	8,050	8,560	4,720	5,380	4,490	4,590	4,520	4,100	4,070	4,030
15	5,720	5,530	6,590	8,160	4,450	5,350	4,460	4,700	4,430	4,030	4,100	4,080
16	5,750	5,220	6,840	7,730	4,330	5,330	4,550	4,810	4,330	4,050	4,120	4,100
17	5,790	5,210	6,900	7,730	4,300	5,280	4,560	4,550	4,320	4,010	4,040	4,130
18	5,790	5,700	6,140	7,340	4,300	5,240	4,580	4,550	4,400	4,100	4,050	4,110
19	5,790	5,820	5,010	6,860	4,300	5,210	4,560	4,530	4,340	4,250	4,070	4,140
20	6,000	5,830	5,700	6,520	4,390	5,210	4,550	4,500	4,120	4,340	4,080	4,170
21	6,600	5,790	7,120	6,520	4,300	5,160	4,500	4,490	4,140	4,250	4,050	4,150
22	6,630	5,640	7,970	6,790	4,090	5,150	4,460	4,650	4,240	4,240	4,070	4,200
23	6,500	5,500	6,880	6,830	4,030	5,090	4,490	4,730	4,300	4,160	4,090	4,450
24	5,740	5,530	6,260	7,000	4,000	5,030	4,460	4,790	4,290	4,180	4,090	4,520
25	5,710	5,540	6,580	6,760	3,970	5,030	4,420	4,850	4,310	4,140	4,100	4,530
26	5,730	5,480	5,820	6,350	4,090	5,510	4,510	4,800	4,370	4,090	4,080	4,520
27	5,730	5,330	5,370	6,590	4,540	5,880	4,420	4,740	4,400	4,080	4,060	4,470
28	5,710	5,390	5,380	6,690	5,090	5,730	4,450	4,740	4,320	4,100	4,070	4,480
29	5,790	5,470	6,010	6,280	------	5,780	4,440	4,690	4,390	4,150	4,090	4,470
30	5,740	5,640	6,560	5,910	------	5,800	4,540	4,590	4,370	4,070	4,080	4,440
31	6,510	------	6,450	5,220	------	5,910	------	4,600	------	4,060	4,040	------
TOTAL	173,410	174,550	220,430	229,110	135,370	170,100	144,540	143,320	131,290	129,550	126,390	126,050
MEAN	5,594	5,818	7,111	7,391	4,835	5,487	4,818	4,623	4,376	4,179	4,077	4,202
MAX	6,630	7,490	9,580	10,300	5,880	6,080	5,910	4,850	4,580	4,400	4,120	4,530
MIN	4,960	5,010	5,010	5,220	3,970	5,030	4,420	4,470	4,120	4,010	4,030	4,010
AC-FT	344,000	346,200	437,200	454,400	268,500	337,400	286,700	284,300	260,400	257,000	250,700	250,000

CAL YR 1972 TOTAL 2,597,830 MEAN 7,098 MAX 16,400 MIN 4,270 AC-FT 5,153,000
WTR YR 1973 TOTAL 1,904,110 MEAN 5,217 MAX 10,300 MIN 3,970 AC-FT 3,777,000

NOTE.--No gage height record Dec. 28 to Jan. 30, Feb. 3 to Mar. 5.

14105700 COLUMBIA RIVER AT THE DALLES, OREG.

LOCATION.--Lat 45°36'27", long 121°10'20", in SW¼SW¼ sec.34, T.2 N., R.13 E., Wasco County, Corps of Engineers land, on left bank 0.3 mi (0.5 km) downstream from Mill Creek, 2.6 mi (4.2 km) downstream from The Dalles Dam, and at mile 188.9 (303.9 km).

DRAINAGE AREA.--237,000 mi² (614,000 km²), approximately.

PERIOD OF RECORD.--October 1857 to September 1877 (annual maximum only, at Lower Cascades Landing, published in WSP 1318), June 1878 to current year. Published as "near The Dalles" 1936-56.

GAGE.--Acoustic velocity meter (AVM) with water-stage and velocity-index recorder. Datum of gage is at mean sea level. See WSP 1738 for history of changes prior to Mar. 16, 1957. Mar. 16, 1957, to Sept. 30, 1968, water-stage recorder at site 0.4 mi (0.6 km) upstream at same datum.

AVERAGE DISCHARGE.--95 years, 194,200 ft³/s (5,500 m³/s), 140,700,000 acre-ft/yr (173 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 221,000 ft³/s (6,260 m³/s) Dec. 5; maximum gage height, 78.02 ft (23.780 m) Aug. 3, minimum daily discharge, 75,500 ft³/s (2,140 m³/s) Sept. 9.
1858-1973: Maximum discharge, 1,240,000 ft³/s (35,120 m³/s) June 6, 1894, gage height, 106.5 ft (32.46 m).
1878-1973: Minimum discharge, 12,100 ft³/s (343 m³/s) Apr. 16, 1968 (recorded by AVM due to closure of John Day Dam).

REMARKS.--Records excellent. Considerable regulation by many large reservoirs. Diurnal fluctuations caused by powerplant and gates at The Dalles Dam. Many diversions for irrigation above station. Records of chemical analysis for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 534: 1920(m). WSP 1094: 1894. WSP 1248: 1866, 1888, 1899, 1909. WSP 1518: 1876(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103,000	169,000	139,000	110,000	154,000	155,000	119,000	131,000	169,000	109,000	158,000	95,100
2	95,500	147,000	149,000	154,000	185,000	136,000	188,000	148,000	122,000	143,000	167,000	86,100
3	112,000	109,000	131,000	161,000	132,000	123,000	208,000	145,000	136,000	119,000	180,000	94,800
4	141,000	91,800	191,000	180,000	91,600	107,000	158,000	164,000	193,000	106,000	108,000	93,300
5	99,800	93,300	221,000	170,000	129,000	174,000	157,000	122,000	156,000	129,000	108,000	95,700
6	121,000	101,000	208,000	130,000	141,000	164,000	141,000	120,000	152,000	138,000	142,000	102,000
7	90,100	131,000	211,000	125,000	166,000	176,000	92,400	166,000	156,000	118,000	146,000	97,000
8	93,600	132,000	184,000	201,000	172,000	171,000	96,500	143,000	193,000	90,400	154,000	75,600
9	115,000	135,000	166,000	188,000	177,000	170,000	144,000	173,000	136,000	147,000	144,000	75,500
10	123,000	141,000	165,000	158,000	129,000	129,000	174,000	156,000	109,000	162,000	136,000	117,000
11	121,000	111,000	192,000	166,000	114,000	110,000	150,000	138,000	163,000	153,000	102,000	114,000
12	131,000	96,300	157,000	140,000	124,000	191,000	154,000	130,000	150,000	176,000	100,000	117,000
13	132,000	132,000	181,000	101,000	121,000	132,000	142,000	117,000	147,000	170,000	127,000	117,000
14	101,000	161,000	159,000	121,000	144,000	146,000	117,000	158,000	149,000	103,000	107,000	122,000
15	96,900	160,000	164,000	153,000	167,000	149,000	93,700	141,000	147,000	105,000	123,000	97,200
16	123,000	135,000	123,000	152,000	159,000	172,000	157,000	142,000	123,000	147,000	123,000	85,300
17	122,000	152,000	128,000	147,000	129,000	103,000	167,000	165,000	113,000	165,000	156,000	104,000
18	119,000	105,000	148,000	169,000	91,000	103,000	196,000	180,000	141,000	173,000	100,000	102,000
19	138,000	89,100	153,000	165,000	151,000	161,000	153,000	168,000	142,000	162,000	106,000	115,000
20	139,000	125,000	147,000	129,000	141,000	151,000	143,000	152,000	146,000	138,000	123,000	120,000
21	102,000	171,000	140,000	134,000	156,000	140,000	116,000	157,000	161,000	100,000	109,000	116,000
22	95,600	138,000	154,000	168,000	139,000	155,000	89,600	155,000	149,000	93,700	128,000	102,000
23	123,000	88,600	149,000	140,000	145,000	155,000	138,000	155,000	114,000	125,000	123,000	82,200
24	126,000	116,000	133,000	167,000	124,000	126,000	127,000	141,000	112,000	139,000	144,000	104,000
25	135,000	121,000	115,000	139,000	99,000	121,000	122,000	162,000	140,000	171,000	108,000	103,000
26	134,000	110,000	119,000	153,000	141,000	165,000	151,000	140,000	141,000	139,000	78,800	111,000
27	136,000	148,000	124,000	152,000	114,000	186,000	136,000	135,000	144,000	142,000	118,000	108,000
28	134,000	127,000	125,000	137,000	123,000	186,000	138,000	128,000	146,000	120,000	131,000	111,000
29	118,000	138,000	143,000	177,000	------	206,000	92,300	153,000	142,000	100,000	139,000	102,000
30	173,000	126,000	131,000	157,000	------	159,000	137,000	159,000	118,000	133,000	144,000	82,700
31	158,000	------	99,100	121,000	------	103,000	------	159,000	------	145,000	138,000	------
TOTAL	3,751.5M	3,800.1M	4,749.1M	4,665.0M	3,858.6M	4,625.0M	4,197.5M	4,603.0M	4,310.0M	4,111.1M	3,970.8M	3,047.5M
MEAN	121,000	126,700	153,200	150,500	137,800	149,200	139,900	148,500	143,700	132,600	128,100	101,600
MAX	173,000	171,000	221,000	201,000	185,000	206,000	208,000	180,000	193,000	176,000	180,000	122,000
MIN	90,100	88,600	99,100	101,000	91,000	103,000	89,600	117,000	109,000	90,400	78,800	75,500
AC-FT	7,441M	7,537M	9,420M	9,253M	7,654M	9,174M	8,326M	9,130M	8,549M	8,154M	7,876M	6,045M

CAL YR 1972 TOTAL 89,696,600 MEAN 245,100 MAX 619,000 MIN 86,600 AC-FT 177,900,000
WTR YR 1973 TOTAL 49,689,200 MEAN 136,100 MAX 221,000 MIN 75,500 AC-FT 98,560,000

14105850 SOUTH FORK MILL CREEK NEAR THE DALLES, OREG.

LOCATION.--Lat 45°32'15", long 121°19'00", in NE¼SE¼ sec.28, T.1 N., R.12 E., Wasco County, on right bank 0.2 mi (0.3 km) upstream from Wicks Reservoir, 7.8 mi (12.6 km) southwest of The Dalles, and at mile 1.1 (1.8 km).

DRAINAGE AREA.--28.0 mi^2 (72.5 km^2).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 914.52 ft (278.746 m) above mean sea level (levels by city of The Dalles).

AVERAGE DISCHARGE.--9 years (1962-71), 15.3 ft^3/s (0.433 m^3/s), 7.42 in/yr (188 mm/yr), 11,080 acre-ft/yr (13.7 hm^3/yr), adjusted for diversion and pumpage; 5 years (1959-62, 1971-73), 19.8 ft^3/s (0.561 m^3/s), 9.60 in/yr (244 mm/yr), 14,350 acre-ft/yr (17.7 hm^3/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 44 ft^3/s (1.24 m^3/s) Dec. 21, gage height, 1.68 ft (0.512 m); minimum, 3.8 ft^3/s (0.108 m^3/s) Sept. 29.

Period of record: Maximum discharge, 1,220 ft^3/s (34.6 m^3/s) Dec. 22, 1964, gage height, 5.22 ft (1.591 m), from slope-area measurement of peak flow; minimum, 0.80 ft^3/s (0.023 m^3/s) Dec. 15, 1965.

REMARKS.--Records good. Flow augmented by ground water pumped into stream 0.5 mi (0.8 km) above station at times causing slight regulation and by diversion from Dog River (Hood River basin) into South Fork Mill Creek several miles above station during low-flow periods. Water stored in Crow Creek Reservoir since February 1969, capacity, 990 acre-ft (1.22 hm^3). Monthly discharges are not adjusted for the augmented flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	7.8	7.8	14	13	13	7.8	11	11	9.2	7.8	4.9
2	12	8.2	8.2	13	13	14	7.8	11	11	9.2	7.8	4.9
3	12	8.2	7.8	13	12	14	7.8	11	11	9.2	7.8	4.6
4	11	8.2	7.4	11	11	14	7.8	11	11	9.2	7.4	4.6
5	11	8.7	7.0	10	11	13	7.8	11	11	9.2	7.4	4.6
6	11	8.2	6.4	10	11	13	7.8	11	11	8.7	7.8	5.5
7	11	8.2	6.2	10	11	12	7.4	11	11	8.7	8.2	5.5
8	11	8.2	6.0	10	11	12	7.4	11	11	7.4	7.8	5.8
9	11	8.2	5.7	10	11	12	9.7	11	11	7.0	7.8	5.8
10	9.2	8.2	5.6	10	11	12	11	11	11	7.0	7.8	5.8
11	9.2	8.2	5.5	10	11	12	11	11	11	7.0	7.8	5.8
12	9.2	8.2	5.4	10	10	11	11	11	11	7.4	7.8	5.8
13	8.7	8.7	5.4	10	10	11	11	11	11	8.7	7.4	5.5
14	8.2	8.2	5.4	9.7	10	11	11	11	10	8.7	7.4	5.5
15	8.2	8.2	5.5	8.7	10	11	11	11	10	8.7	7.4	5.8
16	8.2	8.2	5.6	13	10	11	11	11	11	8.2	7.4	5.8
17	8.2	8.2	6.6	13	10	10	11	11	11	8.2	7.4	5.5
18	8.2	8.2	8.4	19	10	9.7	11	11	10	8.2	7.8	4.3
19	8.2	8.2	13	25	10	9.7	11	12	9.7	8.2	7.4	4.3
20	7.8	8.2	12	23	10	9.7	11	13	9.7	8.2	7.4	4.3
21	7.8	8.2	31	21	10	9.7	11	14	9.7	8.2	7.4	4.3
22	7.8	8.2	20	20	10	9.7	11	13	9.7	8.7	7.4	4.9
23	7.8	8.2	18	19	10	9.2	11	13	9.7	8.2	7.4	4.6
24	7.8	8.2	22	18	9.7	8.7	11	13	9.7	7.0	7.8	4.9
25	7.8	8.7	21	17	10	8.7	11	13	10	5.5	7.4	4.6
26	8.2	8.2	17	17	11	8.7	11	13	9.7	7.0	7.4	4.3
27	8.2	8.2	17	16	12	8.7	11	13	9.7	8.2	7.0	4.0
28	8.2	8.2	16	15	13	8.7	11	13	9.2	7.8	5.5	4.0
29	8.2	8.2	14	14	------	8.2	11	13	9.2	7.8	4.9	4.0
30	8.2	7.8	14	14	------	8.2	11	11	9.2	7.8	4.9	4.0
31	7.8	------	14	13	------	7.8	------	11	------	7.8	4.9	------
TOTAL	283.1	246.7	344.9	436.4	301.7	331.4	302.3	363	310.2	250.3	224.8	148.2
MEAN	9.13	8.22	11.1	14.1	10.8	10.7	10.1	11.7	10.3	8.07	7.25	4.94
MAX	12	8.7	31	25	13	14	11	14	11	9.2	8.2	5.8
MIN	7.8	7.8	5.4	8.7	9.7	7.8	7.4	11	9.2	5.5	4.9	4.0
AC-FT	562	489	684	866	598	657	600	720	615	496	446	294

CAL YR 1972 TOTAL 11,247.2 MEAN 30.7 MAX 590 MIN 5.6 AC-FT 22,310
WTR YR 1973 TOTAL 3,543.0 MEAN 9.71 MAX 31 MIN 4.0 AC-FT 7,030

PEAK DISCHARGE (BASE, 90 CFS).--No peak above base.

14113200 MOSIER CREEK NEAR MOSIER, OREG.

LOCATION.--Lat 45°38'55", long 121°22'35", in NW¼NW¼ sec.19, T.2 N., R.12 E., Wasco County, on left bank 0.1 mi (0.2 km) downstream from West Fork Mosier Creek, 2.5 mi (4.0 km) southeast of Mosier, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--41.5 mi² (107.5 km²).

PERIOD OF RECORD.--April 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 425 ft (130 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 26.1 ft³/s (0.74 m³/s), 18,910 acre-ft/yr (23.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 318 ft³/s (9.01 m³/s) Dec. 21, gage height, 3.57 ft (1.088 m); minimum, 0.76 ft³/s (0.022 m³/s) July 31, Aug. 1.

Period of record: Maximum discharge, 4,790 ft³/s (136 m³/s) Dec. 23, 1964, gage height, 8.9 ft (2.71 m), from flood profile, from rating curve extended above 1,000 ft³/s (28.3 m³/s), on basis of slope-area measurement of peak flow; minimum, 0.60 ft³/s (0.017 m³/s) July 31, 1968, July 30, 1972.

REMARKS.--Records good. No regulation. Several small pumping diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.9	4.9	26	18	25	7.9	3.7	2.3	1.5	.81	1.5
2	3.1	5.4	5.9	25	17	29	7.2	3.5	2.3	1.5	.89	1.4
3	3.1	6.4	5.9	26	16	29	6.9	3.5	2.2	1.3	.95	1.4
4	3.1	6.4	5.7	18	16	29	6.6	3.5	2.0	1.3	.93	1.3
5	3.0	7.0	5.2	18	15	28	6.2	3.4	2.0	1.4	1.0	1.2
6	3.0	5.9	4.8	15	14	26	6.3	3.5	1.9	1.5	1.0	1.2
7	3.0	5.4	4.7	15	13	27	6.1	3.5	1.8	1.5	1.1	1.4
8	3.0	5.1	4.6	15	13	24	5.9	3.6	1.8	1.5	1.0	1.5
9	3.1	5.1	4.5	15	14	21	5.9	3.9	1.9	1.4	1.0	1.5
10	3.1	5.7	4.4	15	14	24	5.6	3.7	1.8	1.4	1.0	1.4
11	3.5	5.1	4.3	15	12	24	7.7	3.7	1.7	1.3	1.0	1.2
12	3.7	5.1	4.3	15	12	23	5.2	3.3	1.8	1.3	.99	1.2
13	3.5	5.1	4.3	78	11	21	5.3	3.1	1.8	1.2	.95	1.2
14	3.5	5.1	4.3	119	11	21	4.7	2.9	1.8	1.1	.97	1.1
15	3.5	4.9	4.3	102	11	20	4.6	2.7	1.8	1.1	.95	1.2
16	3.5	5.1	4.4	112	10	18	4.8	2.6	2.1	1.0	1.0	1.2
17	3.5	4.9	5.7	98	11	17	5.1	2.4	3.5	1.0	1.2	1.3
18	3.5	5.1	9.4	87	11	16	5.1	2.2	3.0	1.0	1.2	1.4
19	3.5	5.1	27	70	11	16	5.4	2.3	2.5	1.0	1.1	2.0
20	3.5	4.9	42	59	11	15	5.0	2.2	2.2	1.0	1.1	2.5
21	3.7	4.6	197	51	11	14	4.6	2.4	1.9	1.1	1.1	2.0
22	3.7	4.6	108	45	11	13	6.5	2.4	1.7	1.2	1.2	2.6
23	3.7	4.6	83	38	11	12	5.0	2.5	1.8	1.2	1.2	2.8
24	3.7	4.9	106	36	12	14	4.6	3.0	1.9	1.1	1.8	3.7
25	3.9	5.4	83	33	13	11	4.3	3.8	1.9	1.1	1.9	2.9
26	4.1	6.4	61	29	16	11	4.1	3.9	1.9	1.0	1.7	2.1
27	4.4	5.7	52	27	20	9.8	3.9	3.2	1.8	.96	1.6	1.9
28	4.9	5.4	48	25	20	9.5	3.8	2.9	1.6	.91	1.4	1.8
29	4.6	5.1	38	22	------	9.0	3.8	2.7	1.4	.86	1.4	1.8
30	4.4	4.9	33	21	------	8.8	3.7	2.5	1.5	.87	1.4	1.8
31	4.4	------	29	19	------	8.8	------	2.3	------	.86	1.5	------
TOTAL	111.2	159.3	998.6	1,289	375	573.9	161.8	94.8	59.6	36.46	36.34	51.5
MEAN	3.59	5.31	32.2	41.6	13.4	18.5	5.39	3.06	1.99	1.18	1.17	1.72
MAX	4.9	7.0	197	119	20	29	7.9	3.9	3.5	1.5	1.9	3.7
MIN	3.0	4.6	4.3	15	10	8.8	3.7	2.2	1.4	.86	.81	1.1
AC-FT	221	316	1,980	2,560	744	1,140	321	188	118	72	72	102

CAL YR 1972 TOTAL 14,196.30 MEAN 38.8 MAX 1,050 MIN 1.3 AC-FT 28,160
WTR YR 1973 TOTAL 3,947.50 MEAN 10.8 MAX 197 MIN .81 AC-FT 7,830

PEAK DISCHARGE (BASE, 110 CFS).--Dec. 21 (0530) 318 cfs (3.57 ft); Jan. 13 (1930) 132 cfs (2.77 ft).

14118500 WEST FORK HOOD RIVER NEAR DEE, OREG.

LOCATION.--Lat 45°35'55", long 121°38'05", in SE¼ sec.1, T.1 N., R.9 E., Hood River County, on left bank 0.3 mi (0.5 km) upstream from Dead Point Creek, 0.8 mi (1.3 km) northwest of Dee, and at mile 0.4 (0.6 km).

DRAINAGE AREA.--95.6 mi² (247.6 km²).

PERIOD OF RECORD.--September 1913 to February 1916 (incomplete), June 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 802.1 ft (244.48 m) above mean sea level. Sept. 1, 1913, to Feb. 12, 1916, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--42 years (1913-14, 1932-73), 560 ft³/s (15.86 m³/s), 405,700 acre-ft/yr (500 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,070 ft³/s (229 m³/s) Dec. 21, gage height, 11.40 ft (3.475 m); minimum, 102 ft³/s (2.89 m³/s) Sept. 16.

Period of record: Maximum discharge not determined, Dec. 22, 1964, gage height, 27.0 ft (8.23 m), from floodmarks; maximum daily, 15,000 ft³/s (425 m³/s) Dec. 23, 1964; minimum, 93 ft³/s (2.63 m³/s) Aug. 22, 1941.

REMARKS.--Records excellent. No regulation. Dee Irrigation District canal diverts from right bank about 6 mi (10 km) above station for irrigation above station and in Middle Fork basin. Diversions from Green Point Creek basin above station for irrigation near Oak Grove; water from two of these diversions is carried in Hood River Irrigation District canal.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	198	343	640	389	674	342	363	245	256	143	112
2	207	370	442	656	375	679	323	360	238	235	141	107
3	198	442	391	578	369	605	317	389	230	227	139	107
4	194	538	340	515	366	558	323	399	222	227	136	110
5	185	406	307	490	351	531	354	369	222	224	143	119
6	183	445	298	370	339	493	363	360	227	212	149	119
7	181	403	270	340	323	466	345	360	240	201	136	164
8	179	391	260	320	317	449	336	405	245	197	132	124
9	179	409	250	300	308	470	336	433	232	199	134	117
10	179	457	240	310	320	852	354	487	206	194	128	126
11	177	397	230	290	317	715	382	433	199	185	126	126
12	173	352	220	700	305	629	416	433	206	174	128	117
13	173	328	210	2,700	296	585	439	439	212	179	136	110
14	171	306	205	1,970	288	523	433	487	201	185	132	109
15	167	283	200	1,330	288	497	409	473	230	181	124	109
16	165	278	200	1,270	290	487	656	436	275	174	123	105
17	163	258	450	1,120	369	477	720	395	463	170	123	105
18	162	260	800	964	351	453	617	372	463	168	117	110
19	160	258	2,920	836	336	449	562	345	357	170	116	126
20	158	243	3,070	734	326	426	507	317	305	168	117	188
21	157	233	6,110	665	323	405	490	285	285	166	117	194
22	158	223	2,790	593	326	392	564	269	296	155	116	199
23	160	225	2,420	550	320	375	538	280	272	149	116	277
24	155	223	2,380	601	323	366	487	363	251	147	157	601
25	155	436	1,690	589	470	363	466	412	419	147	162	617
26	171	1,100	1,300	523	507	357	466	372	515	149	124	356
27	165	422	1,480	487	566	365	473	336	405	153	119	311
28	183	688	1,220	443	550	336	429	308	329	153	116	243
29	169	621	968	443	------	323	399	288	282	149	116	206
30	165	374	825	434	------	330	375	280	261	147	121	185
31	163	------	720	419	------	363	------	267	------	143	123	------
TOTAL	5,393	11,559	33,549	22,180	10,008	14,973	13,203	11,515	8,533	5,584	4,010	5,599
MEAN	174	385	1,082	716	357	483	440	371	284	180	129	187
MAX	238	1,100	6,110	2,700	566	852	720	487	515	256	162	617
MIN	155	198	200	290	288	323	317	267	199	143	116	105
AC-FT	10,700	22,930	66,540	43,990	19,850	29,700	26,190	22,840	16,930	11,080	7,950	11,100

CAL YR 1972 TOTAL 268,821 MEAN 734 MAX 9,770 MIN 123 AC-FT 533,200
WTR YR 1973 TOTAL 146,106 MEAN 400 MAX 6,110 MIN 105 AC-FT 289,800

PEAK DISCHARGE (BASE, 6,100 CFS).--Dec. 21 (0500) 8070 cfs (11.40 ft).

14120000 HOOD RIVER AT TUCKER BRIDGE, NEAR HOOD RIVER, OREG.

LOCATION.--Lat 45°39'20", long 121°32'50", in SE¼ sec.15, T.2 N., R.10 E., Hood River County, on right bank 25 ft (8 m) downstream from Tucker Bridge, 0.5 mi (0.8 km) upstream from Odell Creek, 4.5 mi (7.2 km) southwest of Hood River, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--279 mi² (723 km²).

PERIOD OF RECORD.--October 1897 to December 1899, September 1913 to September 1914, August 1915 to September 1917, January 1965 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 383.2 ft (116.80 m) above mean sea level (Oregon State Highway Department bench mark). Prior to July 23, 1915, nonrecording gage at bridge at various datums. July 23 to Dec. 21, 1915, water-stage recorder at site 0.8 mi (1.3 km) upstream at different datum. January 1916 to September 1917, nonrecording gage at bridge at different datum. Jan. 16 to July 23, 1965, nonrecording gage at bridge.

AVERAGE DISCHARGE.--13 years (1897-99, 1913-14, 1915-17, 1965-73), 1,137 ft³/s (32.20 m³/s), 823,800 acre-ft/yr (1.02 km³/yr).

EXTREMES.--Current year: Maximum discharge, 13,800 ft³/s (391 m³/s) Dec. 21, gage height, 11.93 ft (3.636 m); minimum, 210 ft³/s (5.95 m³/s) Sept. 2.

Period of record: Maximum discharge, 17,800 ft³/s (504 m³/s), Jan. 21, 1972, gage height, 13.78 ft (4.200 m); minimum recorded, 136 ft³/s (3.85 m³/s) Sept. 16, 1915, caused by temporary storage behind dam at Dee.

Flood of Dec. 22, 1964, reached a stage of 20.6 ft (6.28 m), present datum, discharge, 33,200 ft³/s (940 m³/s), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement of peak flow.

REMARKS.--Records good. Some daily fluctuation caused by diversion dam above station and sawmill at Dee. Diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1318: 1899. WSP 1935: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495	388	674	1,300	866	1,080	646	568	404	399	301	229
2	457	486	803	1,350	844	1,090	621	559	395	375	295	219
3	441	740	732	1,170	836	998	611	579	386	369	288	221
4	434	940	642	1,030	828	941	618	593	380	384	282	234
5	425	1,100	582	1,010	803	913	639	559	378	428	315	273
6	421	795	560	918	782	861	657	556	388	386	349	291
7	419	705	550	849	761	828	628	556	466	356	278	347
8	417	680	530	828	745	803	607	593	474	349	266	273
9	415	705	500	811	736	815	593	603	448	360	267	269
10	415	790	480	828	757	1,340	611	670	388	362	262	304
11	415	715	465	815	745	1,140	642	603	364	351	253	315
12	412	649	450	1,420	724	1,000	674	600	364	327	254	286
13	412	621	435	5,250	711	960	699	611	384	334	290	256
14	410	596	425	3,930	695	885	686	690	354	356	290	249
15	404	572	420	2,680	690	844	646	699	375	367	258	242
16	401	556	559	2,500	695	844	908	674	404	367	244	229
17	399	550	960	2,220	790	836	1,020	603	614	349	244	224
18	395	559	1,680	1,970	761	807	894	582	603	347	226	239
19	388	556	4,140	1,740	736	799	832	550	683	367	223	280
20	388	536	4,440	1,540	720	774	761	504	457	395	229	410
21	388	524	9,840	1,400	711	745	732	457	415	358	232	397
22	391	515	4,960	1,250	711	724	799	436	428	297	236	408
23	386	515	4,300	1,160	699	707	803	451	430	278	236	460
24	378	515	4,210	1,230	695	695	736	603	401	267	297	875
25	360	786	3,190	1,200	849	695	715	625	628	273	314	918
26	370	2,230	2,550	1,050	913	682	715	550	875	297	258	539
27	368	1,100	2,850	1,010	969	661	724	498	724	323	245	489
28	390	889	2,360	979	936	649	665	466	575	325	262	417
29	378	790	1,910	946	------	635	632	441	492	312	253	382
30	358	720	1,670	936	------	646	600	432	436	317	262	358
31	350	------	1,460	913	------	674	------	430	------	306	251	------
TOTAL	12,480	21,823	59,327	46,233	21,708	26,071	21,114	17,341	13,911	10,681	8,260	10,633
MEAN	403	727	1,914	1,491	775	841	704	559	464	345	266	354
MAX	495	2,230	9,840	5,250	969	1,340	1,020	699	875	428	349	918
MIN	350	388	420	811	690	635	593	436	354	267	223	219
AC-FT	24,750	43,290	117,700	91,700	43,060	51,710	41,880	34,400	27,590	21,190	16,380	21,090

CAL YR 1972 TOTAL 508,621 MEAN 1,390 MAX 11,500 MIN 319 AC-FT 1,009,000
WTR YR 1973 TOTAL 269,562 MEAN 739 MAX 9,840 MIN 219 AC-FT 534,700

PEAK DISCHARGE (BASE, 6,500 CFS).--Dec. 21 (0700) 13,800 cfs (11.93 ft); Jan. 13 (1530) 6,930 cfs (8.96 ft).

14128910 COLUMBIA RIVER AT WARRENDALE, OREG.

LOCATION.--Lat 45°36'45", long 122°01'35", in NE¼SE¼ sec.35, T.2 N., R.6 E., Multnomah County, on left bank 0.1 mi (0.2 km) downstream from Tumult Creek, 1.0 mi (1.6 km) west of Warrendale, 5.1 mi (9.2 km) downstream from Bonneville Dam, and at mile 141.0 (226.9 km).

DRAINAGE AREA.--240,000 mi^2 (621,600 km^2), approximately.

PERIOD OF RECORD.--October 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum gage height, 17.29 ft (5.270 m) Dec. 22; minimum, 4.58 ft (1.396 m) Sept. 9.
Period of record: Maximum recorded gage height, 30.91 ft (9.421 m) June 20, 1972; minimum, 4.58 ft (1.396 m) Sept. 9, 1973.

REMARKS.--Flow regulated by many reservoirs upstream. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

GAGE HEIGHT (FT.), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.85	6.45	7.32	12.58	8.88	10.43	10.80	8.96	9.52	10.78	8.62	9.72
2	8.13	6.48	7.51	12.26	10.28	10.89	11.59	9.83	10.62	12.90	9.61	11.06
3	8.87	6.29	7.62	10.42	8.48	9.17	11.48	9.91	10.48	12.88	10.81	11.83
4	9.81	7.73	9.16	9.23	7.19	8.12	14.03	9.51	11.43	14.34	11.50	12.72
5	9.15	6.77	7.79	8.84	7.20	8.07	14.01	12.71	13.18	14.12	11.75	12.53
6	9.31	6.81	8.10	9.23	6.82	8.04	14.20	12.34	13.52	13.24	10.33	11.19
7	8.32	6.65	7.42	10.81	7.62	8.84	14.35	13.60	14.05	10.32	9.10	9.52
8	8.38	6.39	7.46	10.96	8.78	9.82	13.73	11.78	12.77	12.91	8.95	11.07
9	8.97	6.55	7.95	11.08	8.70	9.75	13.68	10.40	11.36	12.96	10.70	12.12
10	9.68	6.90	8.41	11.39	9.09	9.90	11.48	10.19	10.79	12.61	9.79	10.97
11	9.46	7.43	8.30	11.19	8.91	9.48	13.43	9.91	11.74	12.08	9.68	11.04
12	9.58	8.76	9.03	9.19	7.23	8.04	13.32	10.22	11.13	11.96	11.18	11.58
13	9.59	8.16	9.15	9.47	7.03	8.29	13.21	9.91	11.28	11.91	9.53	10.86
14	8.92	6.55	7.62	11.18	9.25	9.96	13.33	10.75	11.52	12.54	11.76	12.12
15	7.76	6.32	7.12	11.50	10.55	11.05	11.37	8.54	10.01	14.79	12.15	13.34
16	8.72	6.37	7.64	10.60	9.04	9.99	11.17	8.72	9.62	14.70	12.94	13.63
17	---	---	---	11.26	8.60	9.85	10.56	8.91	9.68	14.19	13.25	13.65
18	---	---	---	10.66	8.05	9.15	12.98	9.93	10.77	15.53	12.81	13.89
19	---	---	---	9.18	7.21	8.03	14.62	11.66	12.73	15.04	14.11	14.58
20	---	---	---	10.22	7.25	8.47	14.79	12.63	13.70	14.76	12.40	13.18
21	---	---	---	13.03	9.29	10.92	16.78	13.92	15.51	12.85	11.75	12.18
22	---	---	---	12.78	10.39	10.98	17.29	16.25	16.75	13.16	11.64	12.34
23	---	---	---	10.42	8.10	8.95	17.21	14.96	15.73	13.96	11.41	12.62
24	---	---	---	9.19	7.24	8.22	16.25	15.43	15.82	12.57	10.92	11.62
25	---	---	---	9.53	8.37	8.79	15.46	14.04	14.61	12.49	10.76	11.39
26	---	---	---	9.92	9.28	9.57	14.04	12.12	12.71	11.48	10.42	10.85
27	---	---	---	11.31	9.06	10.23	13.10	12.31	12.75	11.88	9.98	10.92
28	---	---	---	10.90	8.89	9.50	13.05	12.66	12.87	10.90	9.10	9.69
29	9.06	7.89	8.43	10.56	8.49	9.39	12.96	11.79	12.46	13.09	9.63	11.05
30	12.87	8.12	10.51	10.43	8.87	9.46	12.86	11.93	12.19	13.16	10.37	11.74
31	10.69	9.38	10.12	---	---	---	11.89	9.78	10.56	12.14	10.47	10.90
MONTH	---	---	---	13.03	6.82	9.37	17.29	8.54	12.31	15.53	8.62	11.80

14128910 COLUMBIA RIVER AT WARRENDALE, OREG.--Continued

GAGE HEIGHT (FT.) . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.30	9.91	10.35	12.27	9.21	10.35	9.54	6.78	8.57	9.89	9.00	9.61
2	13.57	10.83	11.87	12.08	10.26	10.75	12.57	9.26	10.70	10.48	9.68	10.02
3	13.17	10.69	11.35	10.68	10.11	10.36	14.31	12.05	12.99	10.47	9.58	9.98
4	11.00	8.25	9.61	10.52	9.09	9.52	14.11	11.74	12.31	11.90	10.17	11.15
5	9.99	8.42	9.17	12.84	9.50	11.02	11.72	10.67	11.02	11.73	9.45	10.24
6	9.92	8.84	9.33	12.76	11.22	12.18	11.26	10.13	10.67	9.42	8.47	8.91
7	11.33	9.49	10.48	13.04	11.53	12.26	10.27	7.21	8.29	11.69	8.93	10.46
8	12.27	10.84	11.60	12.94	11.30	12.17	7.91	6.86	7.34	11.35	9.99	10.55
9	11.82	11.05	11.34	12.79	11.19	12.09	9.81	7.36	8.66	12.40	9.93	10.86
10	11.75	10.10	10.68	12.85	10.41	11.24	11.93	9.73	11.03	12.42	10.62	11.30
11	10.08	9.09	9.63	10.84	8.97	9.75	11.65	10.01	10.66	10.57	9.69	10.15
12	10.04	7.75	9.05	13.61	9.76	11.45	10.27	9.90	10.04	9.66	8.43	8.99
13	9.14	8.40	8.89	13.62	10.57	11.52	10.41	10.09	10.28	9.07	8.01	8.69
14	11.17	8.61	9.43	10.59	9.72	10.15	10.15	8.15	9.01	10.66	8.84	9.80
15	12.66	9.90	11.22	11.31	9.84	10.30	8.72	7.99	8.34	10.39	9.75	10.06
16	12.30	10.42	11.25	13.66	10.32	11.38	10.78	8.05	9.31	10.96	8.76	9.86
17	12.10	10.38	11.04	13.43	8.94	10.23	12.78	10.64	11.45	11.70	10.45	10.92
18	10.65	7.83	8.68	9.74	8.16	8.83	14.08	11.43	12.63	12.92	10.78	11.60
19	11.11	6.95	9.25	12.14	9.59	10.82	13.90	11.48	12.31	12.96	10.82	11.51
20	10.79	9.76	10.26	11.72	10.26	11.11	11.47	10.14	10.73	11.63	10.58	11.01
21	11.15	8.86	10.02	11.73	10.56	11.18	10.14	7.73	9.03	11.44	10.46	11.06
22	11.22	9.64	10.35	11.37	10.50	10.94	8.51	6.83	7.61	10.57	9.39	9.79
23	10.61	9.38	10.10	11.79	10.32	11.01	9.31	7.30	8.52	11.34	10.25	10.79
24	10.33	8.99	9.55	11.23	8.81	9.58	9.54	8.79	9.19	10.24	9.71	10.04
25	9.23	7.55	8.40	9.52	8.12	3.00	9.32	8.15	8.84	11.41	9.78	10.55
26	10.08	7.57	9.17	12.04	8.91	9.90	9.46	8.79	9.12	10.38	9.21	9.86
27	9.65	8.85	9.34	12.77	10.58	12.31	9.77	9.23	9.49	9.63	8.94	9.26
28	9.50	8.38	8.83	13.09	10.76	11.97	9.64	8.60	9.09	9.82	8.93	9.43
29	---	---	---	14.20	11.13	12.70	9.65	7.46	8.58	10.20	8.92	9.77
30	---	---	---	14.04	11.05	12.18	9.21	7.27	8.49	10.96	9.80	10.51
31	---	---	---	11.55	7.47	9.35	---	---	---	11.31	10.02	10.71
MONTH	13.57	6.95	10.00	14.20	7.47	10.69	14.31	6.78	9.81	12.96	8.01	10.24

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.81	10.28	11.25	8.96	7.45	8.27	11.64	9.52	10.49	9.32	6.78	7.59
2	11.50	9.43	10.11	10.17	8.41	9.54	11.75	10.31	10.92	7.48	5.70	6.51
3	10.17	8.84	9.66	10.33	7.87	9.29	12.86	10.59	11.57	7.22	5.34	6.49
4	12.97	9.87	11.56	8.33	7.38	7.82	12.76	8.79	10.04	7.13	5.76	6.21
5	12.21	10.71	11.44	9.44	7.63	8.53	8.88	6.06	7.19	6.45	5.64	6.12
6	10.71	9.50	10.15	9.74	9.24	9.57	8.98	8.03	8.51	6.86	5.90	6.32
7	10.76	9.93	10.42	9.19	7.42	8.22	9.74	9.00	9.43	6.89	6.05	6.52
8	13.08	10.37	11.74	8.01	6.76	7.24	10.23	9.31	9.67	6.24	4.69	5.60
9	12.96	9.63	10.98	9.61	7.00	8.65	10.37	9.65	10.16	6.06	4.58	5.26
10	9.55	7.81	8.27	11.24	9.49	10.43	10.05	8.47	9.16	7.96	5.88	7.30
11	10.77	8.04	9.87	11.05	9.84	10.35	9.11	7.13	7.86	8.64	6.98	7.71
12	10.89	9.16	9.91	12.30	9.94	10.89	7.77	6.77	7.25	8.68	6.72	7.98
13	10.67	9.53	10.09	12.07	10.95	11.47	9.06	7.08	8.30	9.03	6.69	8.07
14	10.26	9.87	10.08	10.97	8.02	9.22	8.51	7.51	7.94	9.20	7.21	8.55
15	10.17	9.71	9.95	7.97	6.99	7.45	8.98	7.07	8.20	8.67	6.52	7.18
16	10.05	8.61	9.39	10.52	7.16	8.97	9.27	7.65	8.28	7.59	5.25	6.25
17	8.82	7.86	8.39	11.96	9.78	10.77	10.68	9.09	9.83	8.96	6.09	7.15
18	10.36	8.59	9.51	12.21	10.66	11.40	10.13	7.36	8.37	7.80	6.56	7.09
19	10.13	9.50	9.84	11.88	10.73	11.10	8.67	5.90	7.08	8.61	4.70	7.63
20	10.97	8.73	9.69	11.24	8.87	10.21	8.97	7.57	8.71	8.66	8.21	8.49
21	11.24	9.91	10.52	9.06	6.91	7.79	8.37	6.07	7.67	8.65	7.61	8.15
22	10.84	9.76	10.11	7.70	6.45	7.02	8.87	7.64	8.27	8.11	7.03	7.56
23	9.96	7.80	8.61	8.93	7.35	8.02	9.10	7.81	8.51	7.76	6.29	6.95
24	8.30	6.80	7.57	9.11	8.13	8.79	9.68	8.62	9.26	8.91	4.66	7.83
25	10.19	8.61	9.47	9.10	7.91	8.56	8.09	7.08	8.17	8.01	7.26	7.95
26	10.36	9.63	9.98	9.47	7.85	8.93	7.69	6.47	7.26	8.90	7.80	8.70
27	10.66	9.59	10.37	9.98	9.13	9.67	8.98	6.16	7.71	8.83	7.76	8.16
28	10.83	9.71	10.37	9.95	7.80	8.83	9.70	8.79	9.38	8.60	6.70	7.65
29	10.86	9.98	10.61	9.27	7.36	8.36	10.11	8.07	9.55	[illegible]	6.31	7.08
30	10.29	8.35	9.25	9.76	8.96	9.63	13.17	9.67	11.76	7.76	5.81	6.52
31	---	---	---	10.38	9.36	9.95	13.06	9.37	11.77	---	---	---
MONTH	13.08	6.80	9.95	12.30	6.45	9.15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YEAR	17.29	4.50	9.86									

14128950 COLUMBIA RIVER AT MULTNOMAH FALLS, OREG.

LOCATION.--Lat 45°34'45", long 122°06'55", in SW¼SE¼ sec.7, T.1 N., R.6 E., Multnomah County, on left bank at Multnomah Falls, 0.7 mi (1.1 km) upstream from mouth of Multnomah Creek, 2.1 mi (3.4 km) downstream from Oneonta Creek, and at mile 136.2 (219.1 km).

DRAINAGE AREA.--240,000 mi^2 (621,600 km^2), approximately.

PERIOD OF RECORD.--November 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum gage height, 17.21 ft (5.246 m) Dec. 22; minimum, 4.55 ft (1.387 m) Sept. 9.
Period of record: Maximum recorded gage height, 31.11 ft (9.482 m) June 19, 20, 1972; minimum, 4.55 ft (1.387 m) Sept. 9, 1973.

REMARKS.--Flow regulated by many reservoirs upstream.

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.78	6.37	7.28	12.52	8.82	10.37	10.61	8.92	9.36	10.71	9.40	10.30
2	8.06	6.49	7.47	12.23	10.26	10.86	11.46	9.81	10.52	12.87	9.95	11.09
3	8.86	6.25	7.56	10.45	8.58	9.19	11.52	9.90	10.50	12.85	10.85	12.09
4	9.75	7.56	9.11	9.13	7.22	8.08	14.01	9.52	11.30	14.30	11.63	12.75
5	9.27	6.78	7.82	8.81	7.22	8.04	14.02	12.77	13.22	14.29	11.89	12.86
6	9.30	6.81	8.10	9.21	6.96	8.04	14.24	12.31	13.54	13.55	10.45	11.38
7	8.30	6.69	7.45	10.67	7.62	8.79	14.37	13.66	14.07	10.45	9.18	9.65
8	8.34	6.41	7.44	10.87	8.76	9.80	13.68	11.75	12.76	13.02	9.02	11.12
9	8.96	6.53	7.90	11.03	8.71	9.75	13.70	10.45	11.48	13.08	10.77	12.24
10	9.62	6.83	8.34	11.39	9.09	9.92	11.56	10.16	10.84	12.78	9.88	11.15
11	9.60	7.42	8.31	11.30	8.88	9.49	13.45	9.92	11.71	12.11	9.81	11.09
12	9.50	8.82	9.04	9.15	7.21	8.06	13.37	10.21	11.21	11.98	11.51	11.75
13	9.52	8.09	9.11	9.32	6.95	8.25	13.12	9.94	11.26	11.91	10.12	11.07
14	8.88	6.56	7.65	11.17	9.20	9.91	13.31	10.84	11.58	12.50	11.77	12.12
15	7.76	6.32	7.12	11.44	10.54	11.06	11.43	8.69	10.10	14.74	12.17	13.33
16	8.64	6.37	7.56	10.65	9.09	10.02	11.30	8.88	9.73	14.68	12.95	13.69
17	8.99	7.36	8.38	11.23	8.60	9.77	10.51	9.21	9.70	14.15	13.28	13.64
18	9.27	7.50	8.45	10.71	7.91	9.69	12.85	9.95	10.73	15.40	12.90	13.87
19	9.83	8.43	9.27	9.13	7.17	8.24	14.55	11.70	12.70	14.96	14.10	14.58
20	9.68	8.46	9.33	10.16	7.58	8.44	14.70	12.67	13.98	14.71	12.41	13.23
21	9.49	7.28	8.25	12.96	9.97	11.02	16.73	13.89	15.42	12.83	11.73	12.21
22	8.60	6.30	7.72	12.96	10.42	11.41	17.21	16.31	16.70	13.14	11.59	12.37
23	9.77	8.24	8.83	10.58	8.12	9.22	17.19	14.93	15.76	13.95	12.18	13.27
24	9.62	8.67	8.97	9.14	8.00	8.33	16.11	15.43	15.79	12.16	11.24	11.56
25	9.85	8.71	9.14	9.32	8.55	8.79	15.50	13.99	14.64	11.99	11.61	11.68
26	10.44	8.63	9.18	9.82	9.24	9.49	13.99	12.34	12.98	11.61	10.40	10.92
27	10.91	9.62	10.41	11.24	8.99	10.14	13.00	12.31	12.74	10.98	10.98	10.98
28	10.52	8.90	9.78	11.13	9.50	10.59	12.97	12.71	12.85	10.98	10.98	10.98
29	9.00	7.87	8.39	10.43	9.15	9.60	12.87	11.98	12.49	10.98	10.98	10.98
30	12.93	7.89	10.47	10.43	8.82	9.48	12.92	11.93	12.29	13.00	12.98	13.00
31	10.64	9.33	10.11	---	---	---	12.04	9.75	10.68	13.00	13.00	13.00
MONTH	12.93	6.25	8.51	12.96	6.95	9.46	17.21	8.69	12.34	15.40	9.02	12.06

14128950 COLUMBIA RIVER AT MULTNOMAH FALLS, OREG.--Continued

GAGE HEIGHT (FT.) . WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.00	13.00	13.00	12.13	9.14	10.22	9.43	6.74	8.54	9.83	8.96	9.53
2	13.00	13.00	13.00	12.15	10.22	10.72	12.50	9.20	10.71	10.38	9.63	9.95
3	13.00	13.00	13.00	10.62	10.00	10.30	14.27	12.02	12.98	10.37	9.52	9.89
4	13.00	10.19	10.39	10.49	9.05	9.47	13.99	11.58	12.19	11.81	10.08	10.98
5	10.20	10.20	10.20	12.79	9.41	10.92	11.54	10.54	10.78	11.84	9.44	10.36
6	10.20	10.20	10.20	12.69	11.22	12.12	10.54	10.01	10.33	9.45	8.38	8.87
7	11.32	10.20	10.26	12.96	11.48	12.18	9.95	7.13	8.01	11.61	8.83	10.19
8	12.22	10.81	11.55	12.96	11.22	12.09	7.10	6.80	6.83	11.45	10.14	10.58
9	11.78	11.01	11.29	12.69	11.07	11.99	6.80	6.80	6.80	12.10	9.82	10.57
10	11.76	10.28	10.66	12.73	10.26	11.15	8.29	6.80	7.50	12.34	10.72	11.39
11	10.30	9.20	9.68	10.86	8.98	9.69	8.32	8.29	8.31	11.06	9.87	10.24
12	9.99	8.81	9.45	13.44	9.73	11.32	8.33	8.32	8.33	9.91	8.39	9.05
13	9.11	8.43	8.88	13.46	10.49	11.44	8.33	7.84	8.24	9.11	7.96	8.70
14	11.07	8.61	9.40	10.49	9.60	10.06	7.84	7.84	7.84	10.61	8.85	9.60
15	12.58	9.87	11.15	11.20	9.79	10.24	10.69	7.84	9.37	10.38	9.76	10.04
16	12.29	10.37	11.20	13.65	10.29	11.35	12.72	10.74	11.64	10.84	8.74	9.77
17	12.01	10.32	10.98	13.45	8.88	10.20	13.97	11.35	12.82	11.55	10.41	10.82
18	10.61	7.76	8.65	9.60	8.15	8.77	12.39	---	---	11.58	10.71	11.23
19	11.07	6.92	9.19	12.09	9.54	10.74	---	11.43	---	11.57	10.67	11.00
20	10.78	9.79	10.23	11.70	10.23	11.05	11.41	10.09	10.65	10.96	10.43	10.71
21	11.13	8.87	10.01	11.64	11.05	11.11	10.09	7.66	8.99	10.43	10.00	10.42
22	11.19	9.63	10.32	11.36	10.43	10.86	8.37	6.74	7.53	10.00	9.28	9.32
23	10.55	9.34	10.03	11.76	10.29	10.96	9.23	7.20	8.37	11.26	9.28	10.67
24	10.33	9.02	9.53	11.21	8.77	9.54	9.37	8.70	9.10	10.18	9.68	9.95
25	9.13	7.51	8.37	9.46	8.04	8.69	9.20	8.08	8.79	11.28	9.84	10.52
26	10.00	7.50	9.09	10.12	8.70	9.34	9.34	8.76	9.00	10.28	9.19	9.76
27	9.58	8.79	9.30	12.73	10.12	11.18	9.59	9.16	9.37	9.58	9.03	9.22
28	9.41	8.36	8.76	13.00	10.63	11.90	9.48	8.53	8.99	9.76	8.87	9.41
29	---	---	---	14.14	11.05	12.66	9.57	7.55	8.60	10.09	8.87	9.78
30	---	---	---	13.97	10.99	12.05	9.15	7.22	8.33	10.83	9.70	10.43
31	---	---	---	11.38	7.42	9.19	---	---	---	11.18	9.97	10.62
MONTH	13.00	6.92	10.29	14.14	7.42	10.75	14.27	6.74	9.24	12.34	7.96	10.11

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.73	10.24	11.18	8.93	7.47	8.23	11.52	9.39	10.40	9.48	6.79	7.61
2	11.20	9.31	10.00	10.07	8.39	9.51	11.69	10.20	10.83	7.53	5.65	6.49
3	10.08	8.76	9.60	10.29	7.84	9.23	12.80	10.51	11.47	7.34	5.27	6.43
4	12.89	9.84	11.53	8.27	7.33	7.77	12.76	8.71	9.97	7.29	5.75	6.21
5	12.15	10.68	11.37	9.37	7.58	8.46	8.92	6.03	7.14	6.58	5.60	6.08
6	10.68	9.43	10.08	9.62	9.24	9.50	8.89	8.00	8.42	6.79	5.84	6.25
7	10.64	9.82	10.34	9.22	7.38	8.17	9.58	8.95	9.33	6.84	6.03	6.47
8	12.94	10.17	11.67	7.97	6.76	7.19	10.19	9.30	9.59	6.10	4.81	5.62
9	12.81	9.45	10.88	9.50	7.00	8.59	10.23	9.71	10.08	5.96	4.55	5.20
10	9.45	7.76	8.14	11.13	9.41	10.37	9.97	8.41	9.07	7.92	5.85	7.20
11	10.72	8.49	10.00	10.95	9.79	10.28	9.02	7.11	7.81	8.56	6.95	7.62
12	10.75	9.11	9.87	12.23	9.92	10.83	7.71	6.71	7.21	8.67	6.67	7.92
13	10.54	9.43	10.02	12.12	10.91	11.45	8.96	6.97	8.23	8.94	6.68	7.97
14	10.58	9.80	10.19	10.99	8.06	9.19	8.37	7.42	7.89	9.25	7.07	8.49
15	10.20	9.27	9.92	7.95	6.96	7.42	8.86	6.94	8.13	9.19	6.51	7.28
16	9.93	8.39	9.20	10.39	7.12	8.89	9.17	7.43	8.21	7.61	5.62	6.27
17	8.69	7.74	8.12	11.89	9.64	10.69	10.37	9.03	9.75	7.98	6.06	7.08
18	7.76	7.74	7.75	12.18	10.58	11.32	10.09	7.36	8.34	8.06	6.47	7.06
19	7.82	7.74	7.79	11.84	10.64	11.02	8.44	5.96	6.96	7.89	6.62	7.36
20	7.82	7.82	7.83	11.16	8.80	10.15	8.82	7.56	8.13	8.65	7.96	8.40
21	11.21	7.82	9.93	8.97	6.88	7.73	8.26	6.81	7.62	8.56	7.59	8.15
22	10.44	9.74	10.04	7.61	6.46	6.96	8.86	7.36	8.13	7.95	6.97	7.52
23	9.89	7.83	8.57	8.72	7.27	7.96	9.10	7.55	8.45	7.84	6.28	7.08
24	8.31	6.81	7.55	8.99	8.14	8.72	9.41	8.40	9.18	8.77	5.39	7.66
25	10.18	8.38	9.43	8.96	7.82	8.47	8.97	7.66	8.10	8.76	7.23	7.99
26	10.29	9.61	9.95	9.31	7.83	8.85	7.76	6.73	7.22	8.86	7.84	8.26
27	10.39	9.58	10.01	9.86	9.08	9.59	8.91	6.13	7.63	8.82	7.60	8.19
28	10.76	9.69	10.29	9.52	7.77	8.79	9.20	6.76	8.20	8.96	6.13	7.68
29	10.76	9.90	10.34	9.32	7.31	8.31	9.98	8.60	9.43	8.58	6.25	7.25
30	10.13	8.29	9.18	9.63	6.88	8.56	10.03	9.29	9.70	8.05	5.71	6.55
31	---	---	---	10.23	9.30	9.88	10.02	9.48	9.72	---	---	---
MONTH	12.94	6.81	9.69	12.23	6.46	9.09	12.80	5.96	8.72	9.48	4.55	7.17
YEAR	17.21	4.55	9.79									

14129400 COLUMBIA RIVER AT WASHOUGAL, WASH.

LOCATION.--Lat 45°34'30", long 122°21'10", in SE¼ sec.53, T.1 N., R.4 E., Clark County, on right bank on rock-fill point at south end of 17th Street, in Washougal, and at river mile 122.9 (197.7 km).

DRAINAGE AREA.--240,400 mi^2 (622,600 km^2), approximately.

PERIOD OF RECORD.--October 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum gage height, 16.17 ft (4.929 m) Dec. 22; minimum, 3.72 ft (1.134 m) Sept. 9.
Period of record: Maximum recorded gage height, 28.87 ft (8.800 m) June 19, 1972; minimum, 3.72 ft (1.134 m) Sept. 9, 1973.

REMARKS.--Flow regulated by many reservoirs upstream.

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.07	5.24	6.25	10.55	7.60	9.02	8.86	7.40	7.96	9.59	7.72	8.67
2	6.85	5.58	6.45	10.48	8.99	9.47	9.81	8.40	9.04	11.24	8.35	9.70
3	7.67	5.52	6.46	9.03	7.39	8.19	9.79	8.81	9.28	11.36	9.70	10.58
4	8.37	6.33	7.74	8.26	6.39	7.23	12.02	8.39	9.83	12.50	10.34	11.17
5	8.05	5.94	6.87	7.97	6.61	7.16	12.24	11.40	11.82	12.50	10.40	11.18
6	---	---	---	8.26	6.35	7.19	12.72	11.04	12.08	11.97	9.40	10.23
7	---	---	---	9.21	7.04	7.80	12.74	12.11	12.44	9.53	8.30	8.70
8	---	---	---	9.28	7.76	8.56	12.07	10.00	11.23	11.70	7.96	9.88
9	---	---	---	9.55	7.68	8.59	12.08	9.62	10.57	11.71	9.78	10.22
10	---	---	---	9.99	7.96	8.81	10.49	9.16	9.83	11.54	9.24	10.22
11	---	---	---	10.01	7.76	8.40	11.91	8.65	10.23	10.94	8.97	10.16
12	---	---	---	8.05	6.24	7.06	11.95	8.94	10.00	10.91	9.94	10.31
13	---	---	---	8.25	6.15	7.16	11.12	8.67	9.74	10.87	8.85	10.04
14	---	---	---	9.49	7.89	8.55	11.37	9.38	10.33	11.72	10.85	11.25
15	---	---	---	9.97	8.97	9.57	10.32	8.25	9.57	13.42	11.23	12.21
16	---	---	---	9.41	7.81	8.75	10.32	7.94	8.94	13.29	11.94	12.56
17	---	---	---	9.75	7.20	8.37	9.34	7.98	8.64	13.16	12.17	12.62
18	---	---	---	9.11	7.14	8.09	11.19	8.76	9.66	14.08	12.00	12.82
19	---	---	---	8.14	6.25	7.19	13.06	10.40	11.41	13.77	12.87	13.31
20	---	---	---	8.81	6.60	7.49	13.37	11.40	12.48	13.61	11.42	12.19
21	---	---	---	11.32	8.20	9.47	15.80	12.99	14.34	11.77	10.68	11.09
22	---	---	---	11.32	9.32	10.03	16.17	15.40	15.70	11.58	10.40	10.98
23	---	---	---	9.53	7.22	8.07	16.12	14.17	14.92	12.26	10.33	11.31
24	---	---	---	8.07	6.38	7.16	15.09	14.00	14.80	11.01	9.73	10.32
25	---	---	---	8.27	7.11	7.52	14.64	13.16	13.78	10.95	9.32	10.22
26	---	---	---	8.73	7.96	8.36	13.13	11.40	11.99	9.82	9.10	9.48
27	---	---	---	9.70	7.74	8.72	12.02	11.52	11.83	10.38	9.18	9.94
28	9.26	7.79	8.43	9.58	7.70	8.34	12.06	11.64	11.87	10.03	8.40	8.88
29	7.91	6.68	7.14	8.75	7.06	7.90	11.66	10.98	11.38	11.09	8.40	9.66
30	10.71	6.88	8.92	8.78	7.61	8.09	11.67	10.77	11.11	11.17	9.12	10.32
31	9.30	8.09	8.81	---	---	---	10.74	8.91	9.64	10.73	9.06	9.53
MONTH	---	---	---	11.32	6.15	8.21	16.17	7.40	11.17	14.08	7.72	10.63

14129400 COLUMBIA RIVER AT WASHOUGAL, WASH.--Continued

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.66	8.70	9.07	10.24	7.71	8.81	8.11	6.00	7.24	8.45	7.45	8.17
2	11.73	9.40	10.37	10.31	8.96	9.39	10.58	7.70	8.95	8.97	8.10	8.53
3	11.62	9.33	10.00	9.44	8.74	9.07	12.31	10.43	11.10	9.04	8.06	8.55
4	9.49	7.40	8.49	9.10	7.85	8.44	12.23	10.14	10.75	10.17	8.62	9.53
5	8.78	7.13	8.01	11.06	8.05	9.53	10.20	9.02	9.50	10.05	8.11	8.91
6	8.77	7.74	8.33	11.07	10.11	10.63	9.75	8.88	9.23	8.16	6.96	7.64
7	10.01	8.35	9.27	11.33	10.01	10.64	8.87	6.32	7.40	9.80	7.35	8.75
8	10.76	9.75	10.35	11.28	9.80	10.60	7.14	5.98	6.46	9.76	8.62	9.00
9	10.30	9.67	10.17	10.92	9.82	10.41	8.22	6.08	7.24	10.33	8.27	9.04
10	10.48	8.73	9.42	10.97	9.01	9.84	10.06	8.25	9.24	10.53	9.15	9.62
11	9.10	7.81	8.45	9.54	8.14	8.56	9.84	8.40	9.05	9.23	8.21	8.76
12	8.77	6.71	7.93	11.42	8.26	9.61	8.56	8.27	8.45	8.43	7.16	7.73
13	8.30	7.64	7.95	11.54	9.01	10.00	8.86	8.39	8.69	8.26	6.77	7.48
14	9.38	7.63	8.27	8.99	8.40	8.65	8.71	6.78	7.73	8.92	7.40	8.30
15	10.88	8.40	9.58	9.43	8.39	8.79	7.51	6.65	7.12	8.95	8.17	8.54
16	10.58	9.06	9.91	11.53	8.84	9.67	8.92	6.71	7.81	9.10	7.90	8.31
17	10.36	9.00	9.62	11.51	7.92	9.05	10.84	8.85	9.72	9.72	8.78	9.19
18	9.22	6.82	7.72	8.44	7.20	7.82	12.11	10.09	10.82	10.74	9.26	9.72
19	9.52	6.21	7.99	10.58	8.18	9.37	12.07	10.01	10.81	10.81	8.98	9.76
20	9.44	8.54	8.98	10.33	9.46	9.76	9.98	8.72	9.27	9.71	8.90	9.31
21	9.54	7.96	8.77	10.07	9.33	9.80	8.71	6.49	7.76	9.59	8.97	9.33
22	9.57	8.40	9.01	9.80	9.06	9.45	7.01	5.56	6.43	8.96	7.84	8.19
23	9.06	8.03	8.62	10.08	9.00	9.44	7.74	6.04	7.02	9.40	8.55	9.04
24	9.07	7.79	8.32	9.89	7.92	8.36	7.76	7.38	7.60	8.88	8.20	8.48
25	7.84	6.39	7.23	8.07	7.01	7.43	7.73	6.77	7.32	9.36	8.44	8.83
26	8.54	6.42	7.78	9.79	7.40	8.10	7.70	7.27	7.49	8.96	7.71	8.33
27	8.21	7.78	8.07	10.64	8.90	9.74	7.97	7.62	7.81	8.23	7.46	7.78
28	7.93	7.21	7.59	10.88	9.04	10.05	7.84	7.22	7.50	8.28	7.51	7.99
29	---	---	---	11.92	9.45	10.68	8.14	6.15	7.22	8.51	7.51	8.34
30	---	---	---	11.96	9.61	10.51	7.65	6.06	7.08	9.23	8.18	8.87
31	---	---	---	9.99	6.31	8.17	---	---	---	9.38	8.53	9.05
MONTH	11.73	6.21	8.75	11.96	6.31	9.36	12.31	5.56	8.32	10.81	6.77	8.67

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.99	8.81	9.53	7.94	6.59	7.17	9.75	8.04	8.87	8.26	5.78	6.54
2	9.73	8.06	8.73	8.70	6.97	8.14	10.01	8.65	9.23	6.54	4.95	5.55
3	8.60	7.52	8.24	8.97	6.95	8.03	10.97	8.96	9.69	6.44	4.40	5.37
4	10.83	8.24	9.70	7.25	6.05	6.71	10.98	7.35	8.62	6.39	4.69	5.23
5	10.64	9.32	9.81	8.18	6.31	7.13	7.95	4.98	6.03	6.05	4.51	5.13
6	9.32	7.99	8.58	8.38	7.76	8.02	7.80	6.59	6.98	5.97	4.69	5.19
7	9.12	8.34	8.73	8.34	6.33	6.92	8.07	7.53	7.79	5.84	4.95	5.38
8	10.88	8.86	9.73	7.31	5.59	6.07	8.32	7.72	8.02	5.46	3.79	4.71
9	11.00	8.25	9.34	7.98	6.28	7.08	8.76	8.07	8.48	4.92	3.72	4.42
10	8.22	6.30	6.96	9.23	7.93	8.65	8.25	7.07	7.63	6.90	4.61	6.05
11	8.94	6.53	8.19	9.08	8.11	8.64	7.70	5.93	6.68	6.99	5.79	6.47
12	8.96	7.57	8.34	10.17	8.47	9.03	6.76	5.62	6.18	7.33	5.68	6.71
13	8.96	7.88	8.55	10.13	9.35	9.70	7.64	5.89	6.96	7.69	5.95	6.83
14	8.90	8.38	8.67	9.48	6.86	7.93	7.15	6.12	6.73	8.17	6.05	7.23
15	9.03	8.22	8.57	6.88	5.92	6.39	7.56	5.83	6.85	7.68	5.65	6.37
16	8.68	7.32	8.03	8.86	6.09	7.52	7.74	6.42	6.96	6.59	4.71	5.59
17	7.76	6.53	7.19	10.21	8.17	9.07	8.82	7.45	8.18	7.10	4.94	6.06
18	8.53	7.08	8.00	10.32	9.18	9.68	8.65	6.37	7.18	6.95	5.26	5.99
19	8.63	8.11	8.36	10.23	9.13	9.66	7.20	5.18	5.88	7.46	5.58	6.26
20	9.26	7.66	8.15	9.53	7.91	8.71	7.29	6.12	6.80	7.51	6.70	7.06
21	9.29	8.63	8.88	7.89	5.86	6.64	7.26	5.63	6.40	7.65	6.36	6.87
22	9.57	8.21	8.69	6.75	5.44	5.89	7.69	6.03	6.68	7.12	5.73	6.45
23	8.69	6.63	7.70	7.26	5.97	6.63	7.95	6.21	7.07	6.85	5.30	6.05
24	7.29	5.72	6.36	7.78	6.94	7.27	7.95	7.22	7.73	7.51	5.35	6.72
25	8.42	7.40	7.95	7.98	6.58	7.17	7.90	6.35	6.96	7.58	6.22	6.98
26	8.98	8.16	8.56	7.76	6.81	7.49	6.78	5.76	6.25	7.75	6.66	7.15
27	9.06	8.16	8.61	8.56	7.63	8.20	7.55	5.67	6.52	7.83	6.58	7.15
28	9.17	8.19	8.80	8.66	6.51	7.68	7.85	6.06	7.00	7.73	5.62	6.66
29	9.26	8.63	8.96	8.55	6.38	7.25	8.62	7.27	8.06	7.26	5.65	6.25
30	9.32	7.86	8.71	9.26	5.91	7.35	8.73	7.96	8.28	6.75	4.88	5.57
31	---	---	---	8.90	7.88	8.46	8.77	8.00	8.28	---	---	---
MONTH	11.00	5.72	8.44	10.32	5.44	7.76	10.98	4.98	7.38	8.26	3.72	6.12
YEAR	14.17	3.72	8.40									

14134000 SALMON RIVER NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°15'55", long 121°43'00", in SE¼NW¼ sec.31, T.3 S., R.9 E., Clackamas County, in Mount Hood National Forest, on right bank near lower end of Red Top Meadows and 3.0 mi (4.8 km) southeast of Government Camp.

DRAINAGE AREA.--8.7 mi^2 (22.5 km^2), approximately.

PERIOD OF RECORD.--May 1910 to May 1912, April 1926 to current year. Published as "near Rowe" 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 3,445.53 ft (1,050.198 m) above mean sea level. Prior to Nov. 21, 1910, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum. Nov. 21, 1910, to May 31, 1912, and Apr. 21, 1926, to Sept. 30, 1933, at site 75 ft (23 m) upstream from former site at different datums. Oct. 1, 1933, to Sept. 30, 1960, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--48 years (1910-11, 1926-73), 44.4 ft^3/s (1.257 m^3/s), 69.30 in/yr (1,760 mm/yr), 32,170 acre-ft/yr (39.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 621 ft^3/s (17.6 m^3/s) Dec. 21, gage height, 3.74 ft (1.140 m); minimum, 15 ft^3/s (0.42 m^3/s) Aug. 19.

Period of record: Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Dec. 23, 1964, gage height, 4.75 ft (1.448 m), from rating curve extended above 310 ft^3/s (8.78 m^3/s), on basis of slope-area measurement of peak flow; minimum, 10 ft^3/s (0.28 m^3/s) Nov. 27, 1952.

REMARKS.--Records excellent except those for February to April, which are fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 769: Drainage area. WSP 1398: 1911-12, 1926-27, 1933(M), 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	29	26	40	30	29	23	36	31	24	21	17
2	23	38	29	39	30	29	23	38	31	23	20	17
3	23	38	25	37	29	28	23	41	31	23	20	19
4	23	41	23	38	29	28	24	41	30	25	19	20
5	22	35	21	35	29	27	28	39	30	26	23	20
6	22	27	21	34	28	27	30	39	30	24	20	20
7	22	25	20	33	27	27	29	41	31	23	18	32
8	22	24	19	32	27	28	29	44	31	23	18	19
9	22	26	19	31	26	29	30	41	30	22	19	19
10	22	26	19	31	25	38	33	43	27	22	18	21
11	21	23	18	31	25	35	37	39	26	23	18	20
12	20	22	18	79	24	32	40	42	28	21	19	19
13	20	22	18	132	24	32	41	49	27	22	20	17
14	20	21	18	78	24	30	41	53	29	23	19	18
15	20	21	19	62	23	29	40	52	36	24	18	17
16	20	21	21	61	23	29	49	49	37	23	18	16
17	20	20	44	53	25	28	48	47	43	22	17	16
18	20	20	51	49	24	28	45	47	38	22	16	17
19	20	20	101	45	23	27	40	44	31	23	16	21
20	20	20	138	42	22	26	38	44	28	23	17	22
21	20	19	299	40	22	26	39	40	29	23	19	25
22	20	19	115	39	22	26	45	38	29	20	19	25
23	20	20	103	38	22	26	43	38	30	19	20	31
24	19	20	82	38	23	27	40	43	26	19	30	49
25	20	68	72	36	26	26	39	41	37	20	20	34
26	26	88	63	35	27	26	44	37	42	21	19	21
27	23	35	68	33	28	25	43	35	31	22	18	19
28	22	30	55	33	29	25	38	35	29	22	18	17
29	21	28	48	33	------	24	37	34	26	20	19	17
30	20	26	45	32	------	24	36	36	25	20	21	17
31	20	------	42	31	------	24	------	36	------	21	20	------
TOTAL	658	872	1,660	1,370	716	865	1,095	1,278	929	688	597	642
MEAN	21.2	29.1	53.5	44.2	25.6	27.9	36.5	41.2	31.0	22.2	19.3	21.4
MAX	26	88	299	132	30	38	49	53	43	26	30	49
MIN	19	19	18	31	22	24	23	34	25	19	16	16
CFSM	2.44	3.34	6.15	5.08	2.94	3.21	4.20	4.74	3.56	2.55	2.22	2.46
IN.	2.81	3.73	7.10	5.86	3.06	3.70	4.68	5.46	3.97	2.94	2.55	2.75
AC-FT	1,310	1,730	3,290	2,720	1,420	1,720	2,170	2,530	1,840	1,360	1,180	1,270

CAL YR 1972 TOTAL 21,163 MEAN 57.8 MAX 299 MIN 18 CFSM 6.64 IN 90.49 AC-FT 41,980
WTR YR 1973 TOTAL 11,370 MEAN 31.2 MAX 299 MIN 16 CFSM 3.59 IN 48.62 AC-FT 22,550

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	0130	2.59	201	1-13	1330	2.46	176
12-21	0200	3.74	621				

NOTE.--No gage-height record Feb. 8 to Mar. 20, Mar. 25 to Apr. 26.

14137000 SANDY RIVER NEAR MARMOT, OREG.

LOCATION.--Lat 45°23'30", long 122°07'40", in SE¼ sec.13, T.2 S., R.5 E., Clackamas County, on right bank 0.7 mi (1.1 km) southwest of Marmot, 0.8 mi (1.3 km) upstream from Sandy River Dam of Portland General Electric Co., 6.6 mi (10.6 km) downstream from Salmon River, and at mile 30.9 (49.7 km).

DRAINAGE AREA.--262 mi² (679 km²).

PERIOD OF RECORD.--August 1911 to current year. Published as "at Marmot" October 1912 to September 1913. Records for January 1916 to June 1919, published as "below dam, near Marmot," obtained by combining records for Sandy River below dam, near Marmot, with records for Sandy River Canal near Marmot.

GAGE.--Water-stage recorder. Altitude of gage is 730 ft (223 m), from river-profile map. Aug. 15, 1911, to Dec. 20, 1915, and July 2, 1919, to Oct. 19, 1933, nonrecording gage at site 1.0 mi (1.6 km) upstream at different datum. Oct. 20, 1933, to Sept. 30, 1958, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum.

AVERAGE DISCHARGE.--62 years, 1,368 ft³/s (38.7 m³/s), 70.91 in/yr (1,801 mm/yr), 991,100 acre-ft/yr (1.22 km³/yr).

EXTREMES.--Current year: Maximum discharge, 18,300 ft³/s (518 m³/s) Dec. 21, gage height, 13.86 ft (4.225 m); minimum, 274 ft³/s (7.76 m³/s) Sept. 17, 18.

Period of record: Maximum discharge, 61,400 ft³/s (1,740 m³/s) Dec. 22, 1964, gage height, 17.05 ft (5.197 m), from rating curve extended above 7,000 ft³/s (198 m³/s); minimum, 195 ft³/s (5.52 m³/s) Nov. 27, 28, 1952.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 594: Drainage area. WSP 1288: 1912(M), 1915, 1922, 1924, 1934(M). WSP 1318: 1932(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	415	839	1,590	924	1,200	1,040	1,040	644	678	410	309
2	415	818	940	1,770	900	1,240	996	1,020	626	644	410	297
3	400	832	860	1,500	876	1,160	964	1,050	626	626	405	293
4	395	1,030	734	1,300	860	1,090	972	1,100	602	626	395	293
5	380	1,080	671	1,230	832	1,040	1,040	1,010	596	614	395	301
6	366	811	600	1,080	806	972	1,040	980	602	602	405	309
7	361	692	550	1,010	776	924	964	996	602	566	390	494
8	357	650	520	1,010	748	884	916	1,060	596	548	375	425
9	357	650	490	1,010	734	924	900	1,070	578	536	370	366
10	361	741	460	1,010	776	1,590	924	1,180	542	542	366	343
11	357	650	490	1,020	762	1,490	964	1,090	530	524	357	336
12	348	584	470	2,510	748	1,310	996	1,040	554	506	357	321
13	348	548	450	6,790	727	1,280	1,010	1,080	572	506	366	305
14	348	518	440	4,880	706	1,200	988	1,230	566	518	366	293
15	339	488	420	3,210	699	1,150	964	1,220	664	524	352	289
16	334	665	400	2,840	692	1,210	1,250	[illegible]	734	506	339	282
17	334	655	727	2,510	960	1,190	1,490	1,060	1,130	488	330	275
18	330	655	1,500	2,200	932	1,120	1,420	980	1,220	488	321	278
19	330	445	3,300	1,910	868	1,160	1,400	926	968	494	313	309
20	325	630	3,770	1,700	825	1,080	1,360	876	818	482	313	420
21	330	615	12,000	1,580	790	1,030	1,270	811	762	488	309	655
22	339	605	5,890	1,610	769	998	1,580	762	768	480	309	476
23	330	600	4,830	1,300	748	968	1,710	762	720	460	305	806
24	321	605	5,400	1,350	762	932	1,520	932	657	425	455	1,600
25	321	1,400	4,500	1,310	960	932	1,420	944	932	420	482	1,050
26	395	5,480	3,140	1,170	980	916	1,440	825	1,270	425	375	948
27	425	2,140	3,200	1,100	1,070	908	1,480	755	1,070	440	336	692
28	440	1,610	2,840	1,050	1,040	909	1,310	727	900	445	309	572
29	420	1,120	2,250	1,000	------	880	1,190	682	797	435	305	500
30	390	968	1,950	1,000	------	960	1,100	682	734	425	309	648
31	370	------	1,780	906	------	[illegible]	------	685	------	415	317	------
TOTAL	11,286	26,880	66,721	55,346	23,220	33,666	35,618	29,721	22,369	15,854	11,144	14,993
MEAN	364	896	2,152	1,785	830	1,086	1,187	959	745	511	359	500
MAX	440	5,480	12,000	6,790	1,070	1,590	1,710	1,230	1,270	678	482	1,050
MIN	321	445	400	906	692	880	900	685	530	415	305	275
CFSM	1.39	3.42	8.21	6.81	3.17	4.15	4.53	3.66	2.84	1.95	1.37	1.91
IN.	1.60	3.82	9.47	7.86	3.30	4.77	5.06	4.22	3.17	2.25	1.58	2.13
AC-FT	22,410	53,320	132,300	109,800	46,070	66,780	70,650	58,950	44,370	31,450	22,100	29,740

CAL YR 1972 TOTAL 648,770 MEAN 1,773 MAX 10,600 MIN 321 CFSM 6.77 IN 92.12 AC-FT 1,287,000
WTR YR 1973 TOTAL 346,951 MEAN 950 MAX 12,000 MIN 275 CFSM 3.63 IN 49.23 AC-FT 688,200

PEAK DISCHARGE (BASE, 7,700 CFS)

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	0300	11.48	8,860	1-13	1530	11.32	8,510
12-21	0600	13.86	18,300				

14138800 BLAZED ALDER CREEK NEAR RHODODENDRON, OREG.

LOCATION.--Lat 45°27'10", long 121°53'25", in NW¼SE¼ sec.25, T.1 S., R.7 E., Clackamas County, in Mount Hood National Forest, on right bank 600 ft (183 m) below the confluence of Bedrock and Hickman Creeks and 8.6 mi (13.8 km) north of Rhododendron.

DRAINAGE AREA.--8.17 mi² (21.16 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (774 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 59.5 ft³/s (1.69 m³/s), 98.90 in/yr (2,512 mm/yr), 43,110 acre-ft/yr (53.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,230 ft³/s (34.8 m³/s) Dec. 21, gage height, 5.26 ft (1.603 m); minimum, 1.8 ft³/s (0.051 m³/s) Oct. 25.

Period of record: Maximum discharge, 2,610 ft³/s (73.9 m³/s) Dec. 22, 1964, gage height, 8.25 ft (2.515 m), from rating curve extended above 330 ft³/s (9.35 m³/s). on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 5-10, 28, 29, 1967.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	28	42	43	20	89	31	35	15	27	3.8	3.8
2	12	55	67	51	19	80	29	36	14	22	3.8	3.6
3	9.1	84	52	38	19	59	28	46	14	19	3.8	3.4
4	8.1	102	44	31	18	52	29	51	12	17	3.4	3.1
5	7.2	97	40	29	17	49	34	39	11	15	3.4	3.1
6	6.6	59	36	28	16	40	39	35	11	15	3.4	3.8
7	5.8	46	36	26	17	35	35	36	9.8	13	3.4	13
8	5.2	48	31	24	13	32	32	51	9.8	11	3.1	4.2
9	4.8	49	29	22	12	48	31	57	9.0	11	3.1	4.9
10	4.6	56	27	21	45	168	36	67	8.4	9.8	3.1	4.5
11	4.5	42	25	186	17	103	42	56	8.4	9.0	3.1	4.1
12	4.2	32	24	327	13	72	48	52	8.4	8.4	3.1	3.8
13	3.8	27	23	643	12	56	51	56	8.4	7.8	2.8	3.4
14	3.7	23	22	301	11	45	45	59	9.8	7.8	2.8	3.4
15	3.1	21	21	148	12	40	39	52	15	7.2	2.8	3.1
16	3.1	18	143	133	13	43	101	43	35	6.7	2.8	3.1
17	2.8	17	183	113	29	38	113	38	83	6.7	2.8	3.1
18	2.7	20	253	83	25	35	72	36	80	6.2	2.8	3.4
19	2.7	21	389	64	25	34	57	30	51	6.2	2.5	4.2
20	2.2	18	396	52	23	30	51	28	39	5.8	2.5	16
21	2.5	17	730	48	22	29	48	26	31	5.8	2.5	32
22	2.6	16	351	36	22	29	61	19	25	5.8	2.5	91
23	2.3	17	364	31	22	28	75	20	22	5.3	2.5	88
24	2.0	17	336	56	23	27	62	34	19	5.3	22	307
25	2.5	150	223	49	59	30	59	30	57	4.9	18	296
26	7.6	356	143	36	66	28	62	31	66	4.9	6.7	93
27	5.3	136	268	30	80	27	65	27	64	4.5	5.3	68
28	5.7	81	161	27	68	25	56	23	45	4.5	4.5	36
29	4.5	62	89	26	------	25	45	19	38	4.5	4.5	27
30	3.8	49	66	25	------	32	36	17	31	4.1	4.1	22
31	3.4	------	41	23	------	36	------	16	------	4.1	4.1	------
TOTAL	152.4	1,764	4,678	2,746	737	1,461	1,512	1,108	877.0	285.3	139.0	1,003.6
MEAN	4.92	58.8	151	88.6	26.3	47.1	50.4	35.7	29.2	9.20	4.48	33.5
MAX	14	356	730	643	80	168	113	67	88	27	22	307
MIN	2.0	16	21	21	11	25	28	16	8.4	4.1	2.5	3.1
CFSM	.60	7.20	18.5	10.8	3.22	5.77	6.17	4.37	3.58	1.13	.55	4.10
IN.	.69	8.03	21.30	12.50	3.36	6.65	6.88	5.04	3.99	1.30	.63	4.57
AC-FT	302	3,500	9,280	5,450	1,460	2,900	3,000	2,200	1,740	566	276	1,990

CAL YR 1972 TOTAL 27,966.0 MEAN 76.4 MAX 730 MIN 1.8 CFSM 9.35 IN 127.36 AC-FT 55,470
WTR YR 1973 TOTAL 16,506.5 MEAN 45.2 MAX 730 MIN 2.0 CFSM 5.53 IN 75.16 AC-FT 32,740

PEAK DISCHARGE (BASE, 500 CFS).--Dec. 21 (0630) 1,230 cfs (5.26 ft); Jan. 13 (1300) 908 cfs (4.45 ft).

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OREG.

LOCATION.--Lat 45°29'50", long 122°00'50", near center of sec.12, T.1 S., R.6 E., Multnomah County, in Mount Hood National Forest, on right bank 1.2 mi (1.9 km) above North Fork, 7.0 mi (11.3 km) southeast of Multnomah Falls, and at mile 14.8 (23.8 km).

DRAINAGE AREA.--47.9 mi^2 (124.1 km^2).

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,080 ft (329 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 427 ft^3/s (12.1 m^3/s), 121.06 in/yr (3,075 mm/yr), 309,400 acre-ft/yr (381 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,950 ft^3/s (169 m^3/s) Dec. 21, gage height, 11.11 ft (3.386 m); minimum, 41 ft^3/s (1.16 m^3/s) Sept. 17, 18.

Period of record: Maximum discharge, 8,610 ft^3/s (244 m^3/s) Jan. 20, 1972, gage height, 13.22 ft (4.029 m); minimum, 33 ft^3/s (0.93 m^3/s) Sept. 27, 1967.

REMARKS.--Records excellent except those for December and April, which are fair. Water stored since 1915 in Bull Run Lake, capacity, 12,270 acre-ft (15.1 hm^3). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	135	225	360	196	561	298	260	148	210	56	48
2	115	344	428	391	187	556	266	240	140	181	54	46
3	103	489	314	294	183	436	249	270	135	162	54	45
4	94	774	244	259	174	387	246	290	125	147	53	44
5	88	697	210	230	165	357	269	260	119	136	53	43
6	81	432	207	198	159	304	300	250	112	130	53	47
7	76	340	212	190	148	274	310	280	109	121	50	103
8	73	350	256	201	148	256	280	330	107	115	49	65
9	71	417	321	212	148	311	270	387	103	107	49	55
10	72	530	462	181	148	1,050	260	485	97	101	49	50
11	69	353	455	198	148	652	280	373	93	97	49	48
12	65	266	284	1,410	148	500	300	324	94	93	48	46
13	63	225	281	4,040	143	447	320	311	97	89	47	43
14	61	190	187	1,940	136	376	310	317	94	86	46	43
15	58	164	160	1,020	143	363	300	286	125	82	46	43
16	57	148	130	1,010	148	380	350	259	216	80	45	42
17	57	136	785	910	261	367	740	234	521	77	45	41
18	56	38	1,430	676	256	330	560	216	539	73	45	49
19	56	143	2,310	526	230	330	510	198	347	72	44	64
20	55	125	2,340	440	207	298	470	178	264	70	43	136
21	57	115	4,250	413	196	279	440	164	221	70	43	261
22	58	109	2,250	337	192	271	600	154	187	70	42	205
23	56	110	2,160	289	183	251	500	159	169	69	42	526
24	55	107	2,230	387	192	239	440	259	152	65	97	1,810
25	56	928	1,470	391	406	236	400	360	707	63	133	1,420
26	91	2,060	922	307	436	230	370	269	1,080	63	63	539
27	81	713	1,510	266	489	221	340	230	583	62	55	327
28	91	440	1,040	239	417	210	320	207	383	61	51	239
29	90	324	639	221	------	198	300	183	289	59	49	192
30	84	259	496	223	------	249	280	169	241	57	49	162
31	77	------	428	218	------	307	------	159	------	56	50	------
TOTAL	2,301	11,561	28,636	17,977	5,987	11,226	10,878	8,061	7,597	2,924	1,652	6,782
MEAN	74.2	385	924	580	214	362	363	260	253	94.3	53.3	226
MAX	135	2,060	4,250	4,040	489	1,050	740	485	1,080	210	133	1,810
MIN	55	107	130	181	136	198	246	154	93	56	42	41
CFSM	1.55	8.04	19.3	12.1	4.47	7.56	7.58	5.43	5.28	1.97	1.11	4.72
IN.	1.79	8.98	22.24	13.96	4.65	8.72	8.45	6.26	5.90	2.27	1.28	5.27
AC-FT	4,560	22,930	56,800	35,660	11,880	22,270	21,580	15,990	15,070	5,800	3,280	13,450

CAL YR 1972 TOTAL 197,569 MEAN 540 MAX 5,530 MIN 40 CFSM 11.3 IN 153.44 AC-FT 391,900
WTR YR 1973 TOTAL 115,582 MEAN 317 MAX 4,250 MIN 41 CFSM 6.62 IN 89.76 AC-FT 229,300

PEAK DISCHARGE (BASE, 3,000 CFS).--Dec. 21 (0430) 5,950 cfs (11.11 ft); Jan. 13 (1330) 5,170 cfs (10.43 ft).

NOTE.--No gage-height record Apr. 5 to May 8.

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OREG.

LOCATION.--Lat 45°29'40", long 122°02'05", in NE¼SW¼ sec.11, T.1 S., R.6 E., Multnomah County, Mount Hood National Forest, on right bank 6.9 mi (11.1 km) southeast of Multnomah Falls and at mile 0.1 (0.2 km).

DRAINAGE AREA.--8.32 mi^2 (21.55 km^2).

PERIOD OF RECORD.--August 1965 to current year.

AVERAGE DISCHARGE.--8 years, 76.6 ft^3/s (2.169 m^3/s), 125.03 in/yr (3,176 mm/yr), 55,500 acre-ft/yr (68.4 hm^3/yr).

GAGE.--Water-stage recorder. Altitude of gage is 1,080 ft (329 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,500 ft^3/s (42.5 m^3/s), Dec. 21, gage height, 6.47 ft (1.972 m); minimum, 14 ft^3/s (0.40 m^3/s) Aug. 20-23, Sept. 4, 5, 12-17.

Period of record: Maximum discharge, 9,700 ft^3/s (275 m^3/s) Jan. 20, 1972, gage height, 9.89 ft (3.014 m), from floodmark, from rating curve extended above 850 ft^3/s (24.1 m^3/s) on basis of slope-area measurement of peak flow; minimum, 9.8 ft^3/s (0.28 m^3/s) Sept. 27-29, 1967.

REMARKS.--Records good. Regulation at times since 1958 by North Fork dam, capacity, about 1,030 acre-ft (1.27 hm^3). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	36	45	65	43	112	50	50	28	42	16	15
2	23	54	96	66	41	106	48	48	26	38	16	15
3	22	80	65	56	39	85	46	57	26	33	16	15
4	21	151	52	48	38	78	44	59	25	30	15	14
5	20	96	44	54	35	75	44	52	24	28	15	14
6	20	63	31	44	33	65	41	49	23	27	15	15
7	19	63	25	40	30	60	39	49	23	26	15	24
8	19	67	22	40	29	56	37	57	23	24	15	18
9	19	117	20	40	28	70	38	73	23	24	15	16
10	19	125	18	39	35	241	38	78	22	23	15	15
11	18	71	21	53	35	138	39	60	21	22	15	15
12	18	58	19	297	31	101	39	53	24	22	15	14
13	18	49	17	1,010	30	92	40	49	25	21	15	14
14	17	38	16	381	29	78	40	46	23	20	15	14
15	17	25	15	214	32	77	40	42	33	20	15	14
16	17	24	20	227	33	77	138	38	52	19	15	14
17	17	23	35	209	57	71	144	34	96	19	15	14
18	17	23	250	157	50	63	112	31	73	19	15	16
19	16	24	452	112	44	62	104	30	50	18	15	19
20	16	21	501	89	40	57	89	28	42	18	14	35
21	17	20	1,190	85	38	54	87	28	35	18	14	65
22	17	19	515	71	37	52	122	26	30	18	14	35
23	16	20	449	63	36	48	109	29	28	18	14	70
24	16	19	481	77	39	47	85	70	32	18	22	301
25	17	80	254	73	80	46	77	77	177	17	26	192
26	25	295	173	60	75	41	71	52	218	17	18	77
27	20	80	287	54	78	40	68	43	106	17	16	53
28	23	57	205	49	70	38	63	38	71	17	15	40
29	21	45	122	47	------	37	57	33	57	17	15	35
30	20	44	89	49	------	49	54	30	49	16	15	30
31	19	------	80	49	------	54	------	28	------	16	15	------
TOTAL	589	1,887	5,609	3,918	1,185	2,270	2,003	1,437	1,485	682	486	1,228
MEAN	19.0	62.9	181	126	42.3	73.2	66.8	46.4	49.5	22.0	15.7	40.9
MAX	25	295	1,190	1,010	80	241	144	78	218	42	26	301
MIN	16	19	15	39	28	37	37	26	21	16	14	14
CFSM	2.28	7.56	21.8	15.1	5.08	8.80	8.03	5.58	5.95	2.64	1.89	4.92
IN.	2.63	8.44	25.08	17.52	5.30	10.15	8.96	6.43	6.64	3.05	2.17	5.49
AC-FT	1,170	3,740	11,130	7,770	2,350	4,500	3,970	2,850	2,950	1,350	964	2,440

CAL YR 1972 TOTAL 38,170 MEAN 104 MAX 1,260 MIN 15 CFSM 12.5 IN 170.66 AC-FT 75,710
WTR YR 1973 TOTAL 22,779 MEAN 62.4 MAX 1,190 MIN 14 CFSM 7.50 IN 101.85 AC-FT 45,180

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	0030	5.83	830	1-13	1000	6.29	1,320
12-21	0500	6.47	1,500				

14139000 BULL RUN RESERVOIR NUMBER ONE NEAR BULL RUN, OREG.

LOCATION.--Lat 45°28'50", long 122°04'50", in NW¼SW¼ sec.16, T.1 S., R.6 E., Multnomah County, in Mount Hood National Forest, in control house of Bear Creek Dam on Bull Run River, 8.2 mi (13.2 km) northeast of Bull Run, and at mile 11.2 (18.0 km).

DRAINAGE AREA.--74.6 mi^2 (193.0 km^2).

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1937, published as Bull Run Reservoir. October 1937 to September 1967 published as Lake Ben Morrow.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Portland Water Bureau). Prior to Oct. 9, 1930, nonrecording gage, and Oct. 9, 1930, to Sept. 30, 1962, water-stage recorder at present site and datum.

EXTREMES.--Current year: Maximum contents observed, 31,090 acre-ft (38.3 hm^3) June 26, elevation, 1,046.20 ft (318.882 m); minimum observed, 13,600 acre-ft (16.8 hm^3) Sept. 20, elevation, 994.86 ft (303.233 m).

Period of record: Maximum contents observed, 31,600 acre-ft (39.0 hm^3) Mar. 31, 1931, elevation, 1,047.0 ft (319.248 m); minimum observed, 169 acre-ft (.208 hm^3) Jan. 10, 1960, elevation, 887.50 ft (270.510 m).

REMARKS.--Lake is formed by concrete dam completed in March 1929 for water supply of city of Portland. Storage began about Apr. 29, 1929; first filling occurred May 15, 1929. Capacity, 26,930 acre-ft (33.2 hm^3) at crest of spillway, elevation, 1,036.0 ft (315.77 m); capacity increased in October 1954 to 30,140 acre-ft (37.2 hm^3) at elevation 1,044.0 ft (318.21 m) by installation of three gates 40 ft (12 m) wide and 8 ft (2.4 m) high. No dead storage. Water is used for power generation by Portland General Electric Co. and municipal supply for city of Portland. Figures herein represent total contents.

COOPERATION.--Gage readings and capacity table furnished by Portland Water Bureau.

REVISIONS (WATER YEARS).--WSP 814: 1935(M). WSP 1935: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	1,029.48	24,490	-
Oct. 31	1,036.60	27,160	+2,670
Nov. 30	1,038.12	27,760	+600
Dec. 31	g1,037.80	27,630	-130
CAL YR 1972	-	-	+350
Jan. 31	1,036.98	27,210	-420
Feb. 28	1,037.34	27,450	+240
Mar. 31	g1,036.97	27,210	-240
Apr. 30	1,042.64	29,570	+2,360
May 31	1,045.60	30,830	+1,260
June 30	g1,045.46	30,770	-60
July 31	1,032.26	25,520	-5,250
Aug. 31	1,013.84	19,160	-6,360
Sept.30	g1,032.77	25,700	+6,540
WTR YR 1973	-	-	+1,210

g Graphically interpolated.

14139700 CEDAR CREEK NEAR BRIGHTWOOD, OREG.

LOCATION.--Lat 45°27'30", long 122°01'50", in NE¼ sec.26, T.1 S., R.6 E., Clackamas County, in Mount Hood National Forest, on right bank 5.8 mi (9.3 km) north of Brightwood and at mile 2.5 (4.0 km).

DRAINAGE AREA.--7.93 mi² (20.54 km²).

PERIOD OF RECORD.--July to November 1964, June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,960 ft (597 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 66.5 ft³/s (1.88 m³/s), 113.88 in/yr (2,893 mm/yr), 48,180 acre-ft/yr (59.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) Dec. 21, gage height, 4.73 ft (1.442 m); minimum, 8.8 ft³/s (0.25 m³/s) Aug. 20-23, Sept. 16, 17.

Period of record: Maximum discharge, 1,990 ft³/s (56.4 m³/s) Dec. 22, 1964, gage height, 7.20 ft (2.195 m), from rating curve extended above 320 ft³/s (9.06 m³/s) on basis of slope-area measurement of peak flow; minimum, 7.1 ft³/s (0.20 m³/s) Aug. 29 to Sept. 3, 1970.

REMARKS.--Records excellent except those above 1,000 ft³/s (28.3 m³/s), which are fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	24	37	58	32	85	56	38	21	36	11	10
2	19	44	64	68	31	76	49	36	21	32	11	10
3	17	68	65	50	31	61	45	42	21	29	11	10
4	16	96	37	41	30	58	43	41	20	27	11	9.6
5	15	76	32	37	29	52	44	36	18	25	11	9.2
6	14	52	33	31	27	45	42	34	18	24	11	10
7	13	45	30	29	25	40	37	35	17	22	10	25
8	13	52	28	27	24	37	35	45	17	21	10	15
9	13	70	27	26	23	48	34	61	17	20	10	12
10	13	83	29	25	31	132	33	68	16	19	10	11
11	12	54	31	35	31	90	33	53	16	18	10	10
12	12	42	29	177	29	78	32	47	16	18	10	10
13	12	35	27	590	27	75	32	42	17	17	9.6	9.6
14	11	30	26	282	26	64	31	39	18	16	9.6	9.6
15	11	25	25	149	29	60	30	36	21	16	9.6	9.6
16	11	23	90	152	29	65	75	33	47	15	9.6	9.2
17	11	21	139	134	54	62	90	30	88	15	9.6	8.8
18	10	23	171	103	48	56	73	27	71	15	9.2	11
19	10	25	305	81	41	57	72	26	48	14	9.2	16
20	9.9	20	315	67	36	53	68	25	39	14	9.2	31
21	11	18	728	64	34	49	65	22	33	14	8.8	50
22	11	17	360	50	33	48	85	21	30	14	8.8	41
23	9.9	17	310	43	31	44	93	23	27	14	8.8	109
24	9.5	17	350	71	32	41	77	46	27	13	32	322
25	10	160	229	64	62	40	67	50	102	13	31	256
26	17	430	139	49	58	38	64	35	153	13	15	98
27	15	132	212	42	65	39	58	31	86	12	12	62
28	20	76	152	37	55	38	50	28	61	12	11	47
29	19	56	96	34	------	35	45	26	49	12	11	38
30	16	43	76	38	------	48	41	24	42	11	11	32
31	14	------	67	37	------	61	------	23	------	11	11	------
TOTAL	414.3	1.874	4.219	2.691	1.003	1.775	1.599	1.123	1.177	552	362.0	1.301.6
MEAN	13.4	62.5	136	86.9	35.8	57.3	53.3	36.2	39.2	17.8	11.7	43.4
MAX	20	430	728	590	65	132	93	68	153	36	32	322
MIN	9.5	17	25	25	23	35	30	21	16	11	8.8	8.8
CFSM	1.69	7.88	17.2	10.9	4.51	7.23	6.72	4.56	4.94	2.24	1.48	5.47
IN.	1.94	8.79	19.79	12.62	4.71	8.33	7.50	5.27	5.52	2.59	1.70	6.11
AC-FT	822	3.720	8.370	5.340	1.990	3.520	3.170	2.230	2.330	1.090	718	2.580

CAL YR 1972 TOTAL 31.730.3 MEAN 86.7 MAX 870 MIN 9.5 CFSM 10.9 IN 148.85 AC-FT 62.940
WTR YR 1973 TOTAL 18.090.9 MEAN 49.6 MAX 728 MIN 8.8 CFSM 6.25 IN 84.87 AC-FT 35.880

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-21	0430	4.73	1,190	2-26	0200	4.02	812
1-13	1530	4.10	860	9-25	0030	3.52	506

14139900 BULL RUN RESERVOIR NUMBER TWO NEAR BULL RUN, OREG.

LOCATION.--Lat 45°26'55", long 122°08'45", on line between secs.25 and 26, T.1 S., R.5 E., Clackamas County, in Mount Hood National Forest, on south tower 0.3 mi (0.5 km) above headworks dam on Bull Run River, 4.4 mi (7.1 km) northeast of Bull Run, and at mile 6.5 (10.5 km).

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Portland Water Bureau).

EXTREMES.--Current year: Maximum contents observed, 22,710 acre-ft (28.0 hm³) Dec. 21, elevation, 863.88 ft (263.311 m); minimum observed, 15,790 acre-ft (19.5 hm³) Nov. 1, 2, elevation, 847.20 ft (258.226 m).

Period of record: Maximum contents observed, 23,660 acre-ft (29.2 hm³) Dec. 22, 1964, elevation, 866.00 ft (263.957 m); no contents at times during low-flow periods.

REMARKS.--Reservoir is formed by earth and rockfill dam with concrete spillway built by Portland Water Bureau. Storage began about Dec. 20, 1961; first filling occurred Dec. 24, 1961. Capacity, 20,990 acre-ft (25.8 hm³) at crest of spillway, elevation, 860.0 ft (262.13 m). Dead storage negligible. Water is used for power generation by Portland General Electric Co. and municipal supply for city of Portland. Figures given herein represent total contents.

COOPERATION.--Elevations and capacity table furnished by Portland Water Bureau.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	858.90	20,520	-
Oct. 31	848.20	16,150	-4,370
Nov. 30	860.35	21,150	+5,000
Dec. 31	860.60	21,260	+110
CAL YR 1972	-	-	+180
Jan. 31	860.22	21,100	-160
Feb. 28	860.40	21,180	+80
Mar. 31	860.32	21,140	-40
Apr. 30	860.20	21,090	-50
May 31	860.10	21,040	-50
June 30	860.34	21,150	+110
July 31	859.20	20,650	-500
Aug. 31	856.25	19,350	-1,300
Sept.30	857.65	19,970	+620
WTR YR 1973	-	-	-550

14140000 BULL RUN RIVER NEAR BULL RUN, OREG.

LOCATION.--Lat 45°26'15", long 122°10'40", in NE¼SW¼ sec.34, T.1 S., R.5 E., Clackamas County, in Mount Hood National Forest, on left bank 1.8 mi (2.9 km) downstream from Bull Run Reservoir Number Two, 2.7 mi (4.3 km) northeast of Bull Run, and at mile 4.7 (7.6 km).

DRAINAGE AREA.--107 mi^2 (277 km^2).

PERIOD OF RECORD.--September 1907 to current year. Records for January 1895 to August 1907, published in WSP 370, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 567.90 ft (173.096 m) above mean sea level (levels by Portland Water Bureau). Prior to July 27, 1909, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 27, 1909, to Sept. 30, 1959, water-stage recorder at site 2.5 mi (4.0 km) upstream at different datums.

AVERAGE DISCHARGE.--66 years, 771 ft^3/s (21.83 m^3/s), 97.85 in/yr (2,485 mm/yr), 558,600 acre-ft/yr (689 hm^3/yr), adjusted for storage in Bull Run Reservoir Number One since 1929 and Bull Run Reservoir Number Two since 1961.

EXTREMES.--Current year: Maximum discharge, 12,300 ft^3/s (348 m^3/s) Dec. 21, gage height, 13.24 ft (4.036 m); minimum daily, 156 ft^3/s (4.42 m^3/s) Oct. 22.

Period of record: Maximum discharge, 25,100 ft^3/s (711 m^3/s) Dec. 22, 1964, gage height, 17.21 ft (5.246 m), from rating curve extended above 8,800 ft^3/s (249 m^3/s) on basis of computation of peak flow over dam; minimum daily, 63 ft^3/s (1.78 m^3/s) Aug. 13-16, 1926.

REMARKS.--Records excellent. Water stored since 1915 in Bull Run Lake, capacity, 12,270 acre-ft (15.1 hm^3), and since 1958 in North Fork Reservoir, capacity, 1,030 acre-ft (1.27 hm^3). Flow regulated since 1929 by Bull Run Reservoir Number One (see station 14139000), and since 1961 by Bull Run Reservoir Number Two (see station 14139900). All records given herein include flow diverted from Bull Run Reservoir Number Two for city of Portland, and that used by Portland General Electric Co. for power generation, which returns to Bull Run River below station. Total diversion, 195,500 acre-ft (241 hm^3) of which 67,600 acre-ft (83.4 hm^3) was used for power generation and returned to Bull Run River.

COOPERATION.--Records of daily diversion furnished by Portland Water Bureau.

REVISIONS (WATER YEARS).--WSP 1288: 1910-11, 1913, 1920-23, 1926, 1929. WSP 1318: 1919(M). WSP 1568: 1952. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	336	536	952	478	919	677	426	331	442	281	178
2	164	325	769	981	441	1,040	621	420	255	336	276	266
3	169	330	774	878	420	896	579	434	245	342	292	275
4	175	320	616	716	414	796	522	431	249	341	276	308
5	165	316	572	657	393	738	531	413	255	301	251	348
6	181	330	421	563	406	657	514	410	254	260	218	319
7	169	648	399	512	367	597	506	416	221	288	280	292
8	166	703	348	509	338	535	443	427	235	248	267	269
9	166	765	343	434	329	547	386	448	192	249	281	271
10	168	1,090	332	381	336	1,340	341	653	206	284	272	263
11	166	852	328	287	324	1,360	343	703	211	231	226	336
12	168	660	334	1,030	321	1,020	350	503	254	270	240	301
13	167	542	336	6,830	334	970	350	526	191	279	257	288
	180	444	336	4,240	344	858	359	523	192	292	214	283
15	167	392	348	2,150	337	778	325	495	185	303	239	168
16	172	322	343	1,900	335	784	321	457	182	286	233	182
17	185	310	405	1,880	344	814	604	397	803	319	207	185
18	174	292	2,030	1,550	528	725	1,130	384	837	315	229	167
19	166	300	3,580	1,240	499	739	941	330	623	302	216	170
20	163	287	3,600	984	462	685	841	313	442	241	238	161
21	162	278	9,360	974	441	648	1,090	311	349	205	257	167
22	156	269	4,750	820	377	605	1,150	344	350	188	241	165
23	157	269	3,900	715	382	571	952	277	330	210	246	159
24	165	258	4,830	749	379	531	794	317	312	239	188	168
25	173	400	3,440	869	575	514	882	729	946	277	162	736
26	174	4,390	2,180	741	756	496	799	558	1,850	287	158	562
27	299	1,870	2,530	635	834	480	718	461	1,260	313	170	396
28	330	1,120	2,450	539	777	465	707	409	635	310	169	346
29	324	841	1,630	510	------	429	631	269	662	293	192	347
30	309	682	1,290	500	------	475	500	277	558	290	203	313
31	338	------	1,120	540	------	651	------	305	------	289	184	------
TOTAL	5,978	19,941	54,290	36,266	12,271	22,663	18,907	13,366	13,615	8,830	7,163	8,389
MEAN	193	665	1,751	1,170	438	731	630	431	454	285	231	280
MAX	338	4,390	9,360	6,830	834	1,360	1,150	729	1,850	442	292	736
MIN	156	258	328	287	321	429	321	269	182	188	158	159
AC-FT	11,860	39,550	107,700	71,930	24,340	44,950	37,500	26,510	27,010	17,510	14,210	16,640
MEAN†	165	759	1,751	1,160	444	726	669	451	455	191	107	400
CFSM†	1.54	7.09	16.4	10.8	4.15	6.78	6.25	4.21	4.25	1.79	1.00	3.74
IN.†	1.78	7.91	18.87	12.51	4.32	7.83	6.98	4.86	4.74	2.06	1.15	4.17
AC-FT†	10.160	45,150	107.680	71,350	24,660	44,670	39,810	27,720	27,060	11,760	6,550	23,800

CAL YR 1972 TOTAL 392,833 MEAN 1,073 MAX 12,100 MIN 154 AC-FT 779,200 MEAN† 1,074 CFSM† 10.0 IN.† 136.63 AC-FT† 779,730
WTR YR 1973 TOTAL 221,679 MEAN 607 MAX 9,360 MIN 156 AC-FT 439,700 MEAN† 608 CFSM† 5.68 IN.† 77.18 AC-FT† 440,360

† Adjusted for change in contents in Bull Run Reservoir Number One and Bull Run Reservoir Number Two.

14141500 LITTLE SANDY RIVER NEAR BULL RUN, OREG.

LOCATION.--Lat 45°24'55", long 122°10'20", in NW¼NW¼ sec.10, T.2 S., R.5 E., Clackamas County, in Mount Hood National Forest, on left bank 0.25 mi (0.40 km) upstream from Portland General Electric Co. dam and tunnel from Sandy River, 3.0 mi (4.8 km) east of Bull Run, and at mile 1.95 (3.14 km).

DRAINAGE AREA.--22.3 mi² (57.8 km²).

PERIOD OF RECORD.--May to July 1911, October 1911 to March 1912, June 1912 to April 1913, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Altitude of gage is 720 ft (220 m), from topographic map. May 23, 1911, to Apr. 29, 1913, nonrecording gage at site 0.85 mi (1.37 km) downstream at different datum, 0.5 mi (0.8 km) downstream from Sandy River diversion tunnel. July 1, 1919, to Sept. 30, 1931, water-stage recorder at site 0.1 mi (0.2 km) downstream at different datum. Oct. 1, 1931, to Nov. 3, 1967, at site 0.1 mi (0.2 km) downstream at datum 712 ft (217 m) above mean sea level. Nov. 4, 1967, to Aug. 8, 1971, water-stage recorder at site 0.1 mi (0.2 km) downstream at datum 697.44 ft (212.580 m) above mean sea level (Portland General Electric Co. bench mark).

AVERAGE DISCHARGE.--54 years (1919-73), 146 ft³/s (4.1 m³/s), 88.91 in/yr (2,258 mm/yr), 105,800 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,830 ft³/s (80.1 m³/s) Dec. 21, gage height, 6.08 ft (1.853 m); minimum, 15 ft³/s (0.42 m³/s) Aug. 20-23.

Period of record: Maximum discharge, 5,320 ft³/s (151 m³/s) Nov. 20, 1921, gage heiehgt, 9.18 ft (2.798 m), site and datum then in use, from rating curve extended above 2,200 ft³/s (62.3 m³/s); minimum, 8 ft³/s (0.23 m³/s) Aug. 20, Sept. 16, 17, 1940.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1154: 1949. WSP 1248: Drainage area. WSP 1288: 1912, 1920-21(M), 1922-23, 1931, 1945. WSP 1318: 1920.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	42	105	171	60	161	140	87	44	71	20	19
2	29	118	147	195	78	159	129	85	46	61	19	18
3	27	150	126	161	77	133	120	103	44	53	18	17
4	26	201	105	161	74	131	118	109	40	48	16	17
5	24	189	96	126	71	122	122	87	36	46	19	16
6	23	136	92	107	68	107	113	82	35	44	19	17
7	22	113	89	92	64	98	100	85	34	42	18	71
8	22	133	85	98	61	90	92	100	33	39	17	37
9	22	138	83	85	58	115	90	115	32	36	17	27
10	23	177	89	80	71	266	92	142	31	35	17	23
11	22	133	94	109	74	181	94	109	30	33	17	21
12	21	109	87	413	68	147	94	98	32	32	17	20
13	20	97	81	1,100	65	140	94	94	35	30	17	19
14	20	85	76	548	62	126	87	92	39	29	16	19
15	19	77	73	327	66	131	82	82	53	28	16	19
16	19	71	69	319	66	145	149	74	84	27	17	16
17	19	66	308	280	122	140	176	65	201	26	17	17
18	19	68	354	237	113	126	140	59	171	25	16	22
19	19	72	590	198	103	133	138	54	107	24	16	24
20	19	65	601	169	94	120	140	53	84	24	15	51
21	19	60	1,600	156	87	118	147	49	68	25	15	78
22	20	58	730	135	84	118	231	46	58	25	15	77
23	19	58	641	122	77	111	231	47	54	24	15	260
24	19	58	793	147	78	109	179	98	53	22	57	676
25	20	332	558	140	131	107	156	105	161	22	64	579
26	37	1,110	367	115	131	101	151	74	287	21	27	215
27	34	312	427	103	151	100	142	62	171	21	22	133
28	37	192	346	96	126	96	118	57	122	20	20	94
29	33	147	253	90	------	90	101	51	98	20	19	74
30	30	120	215	94	------	122	90	47	82	19	19	64
31	27	------	192	98	------	149	------	45	------	20	21	------
TOTAL	741	4,687	9,472	6,264	2,400	3,992	3,856	2,456	2,365	992	640	2,742
MEAN	23.9	156	306	202	85.7	129	129	79.2	78.8	32.0	20.6	91.4
MAX	37	1,110	1,600	1,100	151	266	231	142	287	71	64	676
MIN	19	42	69	80	58	90	82	45	30	19	15	16
CFSM	1.07	7.00	13.7	9.06	3.84	5.78	5.78	3.55	3.53	1.44	.92	4.10
IN.	1.24	7.82	15.80	10.45	4.00	6.66	6.43	4.10	3.95	1.65	1.07	4.57
AC-FT	1,470	9,300	18,790	12,420	4,760	7,920	7,650	4,870	4,690	1,970	1,270	5,440

CAL YR 1972 TOTAL 66,574 MEAN 182 MAX 1,780 MIN 15 CFSM 8.16 IN 111.06 AC-FT 132,000
WTR YR 1973 TOTAL 40,607 MEAN 111 MAX 1,600 MIN 15 CFSM 4.98 IN 67.74 AC-FT 80,540

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
11-26	0230	5.80	2,460	1-13	1400	4.99	1,540
12-21	0400	6.08	2.830	9-24	2330	4.87	1,430

14144800 MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°35'50", long 122°27'20", in NW¼NE¼ sec.9, T.23 S., R.3 E., Lane County, in Willamette National Forest, on right bank 0.2 mi (0.3 km) upstream from Windfall Creek, 8.3 mi (13.4 km) upstream from Hills Creek Dam, 10.2 mi (16.4 km) south of Oakridge, and at mile 240.8 (387.4 km).

DRAINAGE AREA.--258 mi^2 (668 km^2).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,556.83 ft (474.522 m) above mean sea level (levels by Corps of Engineers). Prior to June 21, 1967, at site 0.5 mi (0.8 km) upstream at different datums. June 22, 1967, to June 23, 1971, water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--15 years, 805 ft^3/s (22.8 m^3/s), 42.37 in/yr (1,076 mm/yr), 583,200 acre-ft/yr (719 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,640 ft^3/s (103 m^3/s) Jan. 13, gage height, 8.34 ft (2.542 m); minimum, 232 ft^3/s (6.57 m^3/s) Sept. 12, 13.

Period of record: Maximum discharge, 39,800 ft^3/s (1,130 m^3/s) Dec. 22, 1964, gage height, 16.96 ft (5.169 m), from floodmark, site and datum then in use, from rating curve extended above 5,100 ft^3/s (144 m^3/s) on basis of slope-area measurement of peak flow; minimum, 209 ft^3/s (5.92 m^3/s) Oct. 9, 10, 1968.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	410	436	756	648	744	615	750	512	319	240	235
2	293	399	424	756	625	696	610	750	492	312	238	235
3	290	521	464	726	605	648	610	780	476	309	240	235
4	290	786	432	654	620	630	615	838	460	305	240	235
5	282	585	408	630	654	605	654	786	448	305	238	235
6	282	504	412	595	660	610	684	768	440	302	240	233
7	282	464	392	568	620	590	648	768	432	295	238	258
8	282	452	340	546	610	585	625	768	424	291	238	243
9	290	440	340	536	590	576	636	744	424	288	238	240
10	367	460	340	544	620	824	666	714	412	284	238	238
11	560	452	360	720	625	859	702	696	400	277	238	238
12	418	424	380	2.280	625	792	810	720	400	277	235	235
13	556	412	360	3.180	605	720	1.120	798	400	270	235	235
14	432	396	348	2.300	605	678	992	901	392	267	233	238
15	371	384	348	1.750	595	636	908	957	396	264	233	238
16	350	376	452	1.830	576	654	943	950	416	258	235	240
17	347	368	1.870	1.570	590	648	1.180	922	484	258	233	240
18	325	372	1.910	1.350	585	625	1.110	866	460	255	235	246
19	315	384	2.380	1.120	568	654	1.070	786	428	258	235	252
20	306	384	2.330	1.010	548	660	1.010	708	400	261	233	312
21	303	380	2.240	922	540	660	957	636	384	258	233	302
22	300	388	3.100	852	528	660	1.000	595	396	258	235	288
23	296	376	2.540	792	528	625	1.000	580	380	255	235	352
24	293	368	2.380	786	524	615	950	780	368	255	246	524
25	290	368	1.750	780	532	615	900	780	360	249	261	476
26	290	504	1.340	714	544	605	900	654	364	249	246	348
27	293	536	1.200	690	564	585	950	595	348	246	240	305
28	316	500	1.100	654	585	576	900	564	340	246	240	284
29	296	472	971	642	------	552	860	540	330	246	238	270
30	293	456	880	666	------	585	792	536	326	243	238	264
31	300	------	810	678	------	625	------	536	------	240	238	------
TOTAL	10.201	13.321	33.037	31.597	16.519	20.137	25.417	22.766	12.292	8.400	7.383	8.274
MEAN	329	444	1.066	1.019	590	650	847	734	410	271	238	276
MAX	560	786	3.100	3.180	660	859	1.180	957	512	319	261	524
MIN	282	368	340	536	524	552	610	536	326	240	233	233
CFSM	1.28	1.72	4.13	3.95	2.29	2.52	3.28	2.85	1.59	1.05	.92	1.07
IN.	1.47	1.92	4.76	4.56	2.38	2.90	3.66	3.28	1.77	1.21	1.06	1.19
AC-FT	20.230	26.420	65.530	62.670	32.770	39.940	50.410	45.160	24.380	16.660	14.640	16.410

CAL YR 1972 TOTAL 418.853 MEAN 1.144 MAX 10.300 MIN 282 CFSM 4.43 IN 60.39 AC-FT 830.800
WTR YR 1973 TOTAL 209.344 MEAN 574 MAX 3.180 MIN 233 CFSM 2.22 IN 30.18 AC-FT 415.200

PEAK DISCHARGE (BASE, 3,500 CFS).--Jan. 13 (0900) 3,640 cfs (8.34 ft).

14144900 HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°40'50", long 122°22'10", in NW¼NW¼ sec.8, T.22 S., R.4 E., Lane County, in Willamette National Forest, on right bank 0.2 mi (0.3 km) downstream from Tufti Creek, 0.7 mi (1.1 km) upstream from Hills Creek Lake, 6.5 mi (10.5 km) southeast of Oakridge, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--52.7 mi^2 (136.5 km^2).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1971, published as Hills Creek above Hills Creek Reservoir.

GAGE.--Water-stage recorder. Datum of gage is 1,630.80 ft (497.068 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--15 years, 152 ft^3/s (4.30 m^3/s), 39.17 in/yr (995 mm/yr), 110,100 acre-ft/yr (136 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,040 ft^3/s (29.5 m^3/s) Jan. 13, gage height, 5.96 ft (1.817 m); minimum, 16 ft^3/s (0.45 m^3/s) Sept. 5, 6, 16, 17.
Period of record: Maximum discharge, 10,700 ft^3/s (303 m^3/s) Dec. 22, 1964, gage height, 12.23 ft (3.728 m), from rating curve extended above 1,800 ft^3/s (51.0 m^3/s) on basis of slope-area measurement of peak flow; minimum, 14 ft^3/s (0.40 m^3/s) Nov. 1, 1958.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	36	56	134	100	114	167	133	71	39	23	19
2	27	56	52	146	97	103	167	133	65	37	23	18
3	26	72	58	131	95	97	167	140	64	36	22	18
4	26	125	49	111	97	97	176	155	62	35	22	17
5	25	108	45	103	103	92	209	135	59	34	22	17
6	25	72	46	95	103	92	215	135	57	34	22	17
7	25	64	42	85	97	87	182	130	57	34	22	34
8	25	64	42	77	90	82	164	125	57	33	21	23
9	28	62	42	75	87	80	167	123	55	31	21	21
10	51	68	42	72	90	131	176	115	52	30	21	19
11	100	62	42	117	90	146	185	113	50	30	21	18
12	60	54	42	512	92	125	218	128	50	29	21	18
13	66	49	42	820	90	114	385	166	52	29	20	17
14	54	45	40	580	90	108	309	215	47	28	20	17
15	43	42	40	444	90	108	250	225	52	28	20	17
16	39	39	118	436	85	119	236	204	53	27	19	17
17	37	37	590	382	100	122	300	184	64	27	19	17
18	34	36	532	319	100	119	280	155	64	27	20	18
19	32	37	615	245	97	143	280	128	60	27	19	21
20	30	36	545	200	92	140	272	105	59	28	19	40
21	29	36	540	173	85	137	236	92	53	27	19	31
22	29	39	595	149	80	131	253	83	53	26	19	29
23	28	36	524	131	77	117	246	81	53	26	19	39
24	27	35	524	128	75	117	211	166	49	26	22	77
25	26	34	417	134	77	122	194	163	46	25	24	69
26	28	75	329	117	77	119	204	118	46	25	21	46
27	27	75	273	108	80	108	222	99	44	24	20	35
28	30	64	227	105	82	108	194	89	42	24	20	30
29	29	64	188	105	------	103	163	83	40	24	19	27
30	28	62	164	105	------	122	140	79	39	23	18	26
31	28	------	149	105	------	173	------	77	------	23	19	------
TOTAL	1,090	1,684	7,002	4,444	2,518	3,576	6,568	4,077	1,615	896	637	812
MEAN	35.2	56.1	226	208	89.9	115	219	132	53.8	28.9	20.5	27.1
MAX	100	125	615	820	103	173	385	225	71	39	24	77
MIN	25	34	40	72	75	80	140	77	39	23	18	17
CFSM	.67	1.06	4.29	3.95	1.71	2.18	4.16	2.50	1.02	.55	.39	.51
IN.	.77	1.19	4.94	4.55	1.78	2.52	4.64	2.88	1.14	.63	.45	.57
AC-FT	2,160	3,340	13,890	12,780	4,990	7,090	13,030	8,090	3,200	1,780	1,260	1,610

CAL YR 1972 TOTAL 86,847 MEAN 237 MAX 2,680 MIN 25 CFSM 4.50 IN 61.30 AC-FT 172,300
WTR YR 1973 TOTAL 36,919 MEAN 101 MAX 820 MIN 17 CFSM 1.92 IN 26.06 AC-FT 73,230

PEAK DISCHARGE (BASE, 700 CFS).--Jan. 13 (1030) 1,040 cfs (5.96 ft).

14145100 HILLS CREEK LAKE NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°42'30", long 122°25'25", in NW¼ sec.35, T.21 S., R.3 E., Lane County, in Willamette National Forest, near right end of Hills Creek Dam on Middle Fork Willamette River. 600 ft (183 m) downstream from Hills Creek, 3.5 mi (5.6 km) southeast of Oakridge, and at mile 232.5 (374.1 km).

DRAINAGE AREA.--389 mi² (1,008 km²).

PERIOD OF RECORD.--August 1961 to current year. Prior to October 1971, published as Hills Creek Reservoir near Oakridge.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 338,000 acre-ft (417 hm³) June 28, elevation, 1,536.43 ft (468.304 m); minimum, 117,200 acre-ft (145 hm³) Dec. 16, elevation, 1,421.90 ft (433.395 m).

Period of record: Maximum contents, 354,200 acre-ft (437 hm³) June 25, 1971, elevation, 1,542.52 ft (470.160 m); minimum, 104,800 acre-ft (129 hm³) Jan. 2, 1969, elevation, 1,412.52 ft (430.536 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1961 by the Corps of Engineers; storage began August 1961. Total capacity is 355,600 acre-ft (438 hm³) at elevation 1,543.0 ft (470.31 m), top of spillway gates, and usable capacity is 248,900 acre-ft (307 hm³) between elevations 1,414.0 ft (430.98 m), minimum power pool, and 1,543.0 ft (470.31 m). Reservoir used for flood control and power generation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,410	101,500	1,460	174,900	1,520	297,200
1,420	114,600	1,480	211,000	1,540	347,300
1,440	143,000	1,500	251,900	1,544	358,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242.300	195.400	159.900	156.800	174.600	201.900	241.800	298.600	335.000	337.300	325.900	287.800
2	240.000	194.400	158.200	156.500	175.700	203.200	243.200	300.000	335.500	337.100	325.500	286.900
3	237.700	192.600	156.000	156.300	176.800	204.200	244.600	301.400	335.900	336.800	325.100	286.200
4	235.500	191.300	153.600	155.900	177.900	205.300	245.900	302.900	336.200	336.500	324.500	285.300
5	233.200	190.000	151.100	155.800	179.000	206.300	247.400	304.200	336.500	336.300	323.900	284.200
6	230.800	188.200	148.700	155.700	180.200	207.400	249.000	305.500	336.700	336.000	323.100	283.500
7	228.500	186.100	146.200	155.600	181.300	208.300	250.400	306.900	336.800	335.800	322.400	282.800
8	228.200	183.900	143.600	155.300	182.300	209.500	251.500	308.000	336.900	335.400	321.500	282.000
9	224.000	181.700	140.800	154.600	183.200	210.700	252.900	309.100	336.900	335.200	320.600	281.200
10	222.200	180.500	138.200	153.300	184.300	212.300	254.100	310.300	336.900	334.900	319.900	280.400
11	221.100	179.100	133.200	152.700	185.400	214.200	255.500	311.400	336.800	334.600	319.100	279.600
12	219.600	177.700	125.500	157.200	186.500	215.800	257.300	312.600	336.700	334.300	318.400	278.700
13	218.400	176.200	121.200	165.200	187.500	217.200	260.100	314.000	336.700	334.000	317.500	277.900
14	218.000	175.100	119.100	170.600	188.600	218.600	262.300	315.800	336.600	333.700	315.400	277.100
15	217.500	173.800	117.800	173.700	189.500	219.900	264.300	317.800	336.600	333.400	313.200	276.300
16	216.100	172.600	117.200	175.700	190.400	221.100	266.400	319.500	336.500	333.100	311.000	275.400
17	214.300	171.200	122.400	175.700	191.400	222.400	269.300	321.100	336.700	332.700	308.800	273.900
18	212.500	169.900	127.200	174.800	192.600	223.700	272.200	322.600	337.100	332.400	306.600	271.500
19	210.500	168.500	133.400	173.100	193.500	225.300	275.000	323.900	337.300	332.100	304.400	269.200
20	208.700	167.400	137.800	172.100	194.300	227.000	277.600	324.900	337.400	331.200	302.200	267.200
21	207.900	166.600	141.100	170.800	195.100	228.400	280.000	325.700	337.700	330.200	299.900	265.000
22	207.100	165.800	147.600	169.700	195.900	229.800	282.400	326.400	337.900	329.700	297.700	262.800
23	206.200	164.900	152.100	168.800	196.600	231.200	284.500	327.300	337.900	329.200	295.900	260.700
24	205.300	164.000	156.400	168.100	197.300	232.400	286.600	328.700	337.900	328.800	295.300	259.200
25	204.000	163.200	158.500	167.700	198.000	233.600	288.400	330.000	337.800	328.500	294.600	257.400
26	202.800	162.700	159.200	167.500	198.800	234.800	290.300	331.000	337.900	328.100	293.800	255.300
27	201.500	162.400	159.300	168.800	199.600	235.900	292.300	331.800	337.900	327.700	293.100	253.100
28	200.300	161.900	160.000	169.900	200.600	236.900	294.100	332.600	338.000	327.300	292.300	250.800
29	199.000	161.300	159.700	171.000	-------	237.800	295.700	333.300	337.800	327.000	291.600	248.500
30	197.800	160.600	158.800	172.200	-------	239.000	297.200	333.900	337.600	326.600	289.900	246.200
31	196.500	-------	157.800	173.500	-------	240.400	-------	334.500	-------	326.200	288.500	-------
MAX	242.300	195.400	160.000	175.700	200.600	240.400	297.200	334.500	338.000	337.300	325.900	287.800
MIN	196.500	160.600	117.200	152.700	174.600	201.900	241.800	298.600	335.000	326.200	288.500	246.200
(†)	1,472.27	1,451.30	1,449.55	1,596.16	1,474.50	1,496.63	1,519.98	1,535.09	1,536.27	1,531.84	1,516.30	1,497.36
(‡)	-48,100	-35,900	-2,800	+15,700	+27,100	+39,800	+56,800	+37,300	+3,100	-11,400	-37,700	-42,300

CAL YR 1972 MAX 351.500 MIN 113.800 AC-FT ‡ +11,200
WTR YR 1973 MAX 338.000 MIN 117.200 AC-FT ‡ + 1,600

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°43'20", long 122°26'15", in NW¼NE¼ sec.27, T.21 S., R.3 E., Lane County, in Willamette National Forest, on right bank 90 ft (27 m) upstream from highway bridge, 0.4 mi (0.6 km) upstream from Salt Creek, 1.1 mi (1.8 km) downstream from Hills Creek Dam, 2.3 mi (3.7 km) southeast of Oakridge, and at mile 231.4 (372.3 km).

DRAINAGE AREA.--392 mi^2 (1,015 km^2).

PERIOD OF RECORD.--October 1913 to September 1914, September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,208.01 ft (368.201 m) above mean sea level (levels by Corps of Engineers). Oct. 3, 1913, to Sept. 30, 1914, nonrecording gage and Sept. 1, 1935, to Aug. 18, 1960, water-stage recorder at sites 400 ft (122 m) and 1,000 ft (305 m) downstream, respectively, at different datum.

AVERAGE DISCHARGE.--39 years, 1,143 ft^3/s (32.4 m^3/s), 39.60 in/yr (1,006 mm/yr), 828,100 acre-ft/yr (1.02 km^3/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,280 ft^3/s (121 m^3/s) Dec. 12, gage height, 6.06 ft (1.847 m); minimum, 35 ft^3/s (0.99 m^3/s) May 8.

Period of record: Maximum discharge, 34,000 ft^3/s (963 m^3/s) Dec. 28, 1945, gage height, 12.06 ft (3.676 m), site and datum then in use, from rating curve extended above 13,000 ft^3/s (368 m^3/s); minimum observed, 0.70 ft^3/s (0.020 m^3/s) Sept. 8-11, 13, 1961.

REMARKS.--Records excellent. Flow regulated since 1961 by Hills Creek Lake (see station 14145100). No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1248: 1914.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.460	977	849	1.450	309	302	298	309	323	495	480	686
2	1.460	958	1.220	1.220	309	298	295	309	323	485	480	686
3	1.470	1.560	1.670	1.040	309	302	291	309	323	485	485	696
4	1.480	1.580	1.670	994	302	302	288	312	352	480	595	696
5	1.480	1.590	1.670	883	302	302	291	309	376	480	600	690
6	1.480	1.590	1.660	759	305	302	291	312	376	485	702	690
7	1.490	1.620	1.650	760	302	302	295	252	386	490	696	696
8	1.500	1.650	1.650	754	302	155	295	309	444	485	696	702
9	1.510	1.660	1.650	1.010	305	142	291	326	480	480	696	696
10	1.430	1.190	1.650	1.250	302	302	295	316	480	480	696	696
11	1.290	1.180	2.620	1.200	302	295	298	312	485	480	690	696
12	1.290	1.180	4.170	1.170	298	295	298	312	480	480	690	696
13	1.290	1.180	3.060	1.140	302	298	302	309	480	475	696	690
14	745	990	1.420	1.040	302	298	298	210	480	475	1.370	696
15	736	982	1.030	1.040	305	295	298	173	485	475	1.410	696
16	1.110	982	893	1.970	312	302	309	312	485	470	1.430	690
17	1.300	1.070	910	2.580	309	302	316	312	485	475	1.410	1.080
18	1.290	1.080	913	2.440	309	298	312	316	420	470	1.430	1.500
19	1.290	1.080	916	2.670	309	190	312	316	368	485	1.430	1.490
20	1.280	958	1.340	2.030	298	143	312	316	372	762	1.430	1.490
21	785	814	1.620	2.040	298	319	309	316	368	876	1.450	1.490
22	784	814	1.590	1.790	295	312	305	316	366	575	1.440	1.500
23	785	841	1.590	1.630	295	305	316	319	480	535	1.140	1.490
24	785	843	1.600	1.470	295	302	316	319	485	490	672	1.500
25	972	840	1.600	1.410	302	302	312	316	420	485	672	1.500
26	971	838	1.600	1.120	309	305	309	319	388	485	672	1.500
27	1.000	833	1.660	356	305	312	309	323	384	485	672	1.520
28	985	832	1.180	344	302	323	309	323	384	485	672	1.510
29	979	828	1.400	316	------	316	316	319	485	485	672	1.510
30	982	845	1.650	305	------	309	312	316	490	490	1.160	1.520
31	987	------	1.550	305	------	305	------	316	------	490	1.030	------
TOTAL	36.396	33.385	49.651	38.486	8.494	8.855	9.098	9.453	12.653	15.773	28.364	31.694
MEAN	1.174	1.113	1.602	1.241	303	286	303	305	422	509	915	1.056
MAX	1.510	1.660	4.170	2.670	312	323	316	326	490	876	1.450	1.520
MIN	736	814	849	305	295	142	288	173	323	470	480	686
AC-FT	72.190	66.220	98.480	76.340	16.850	17.560	18.050	18.750	25.100	31.290	56.260	62.870
MEAN†	392	510	1,556	1,497	791	933	1,258	912	474	323	302	346
CFSM†	1.00	1.30	3.97	3.82	2.02	2.38	3.21	2.33	1.21	.82	.77	.88
IN.†	1.15	1.45	4.58	4.40	2.10	2.74	3.58	2.68	1.35	.95	.89	.98
AC-FT†	24,090	30,320	95,680	92,040	43,950	57,360	74,850	56,050	28,200	19,890	18,560	20,570

CAL YR 1972 TOTAL 552,078 MEAN 1,508 MAX 6,810 MIN 101 AC-FT 1,095,000 MEAN† 1,524 CFSM† 3.89 IN.† 52.92 AC-FT† 1,106,200
WTR YR 1973 TOTAL 282,302 MEAN 773 MAX 4,170 MIN 142 AC-FT 559,900 MEAN† 776 CFSM† 1.98 IN.† 26.87 AC-FT† 561,500

† adjusted for change in contents in Hills Creek Lake.

14146500 SALMON CREEK NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°45'45", long 122°17'20", in NE¼ sec.7, T.21 S., R.4 E., Lane County, Willamette National Forest, on right bank 190 ft (58 m) upstream from Salmon Creek Falls, 0.1 mi (0.2 km) upstream from Needle Creek, 4.6 mi (7.4 km) east of Oakridge, and at mile 5.84 (9.40 km).

DRAINAGE AREA.--117 mi² (303 km²), at measuring cable 0.6 mi (1.0 km) downstream from gage.

PERIOD OF RECORD.--October to November 1909 (gage heights and one discharge measurement only), February 1913 to October 1919, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as Kelsey River near Hazeldell and Salmon Creek near Hazeldell, 1909.

GAGE.--Water-stage recorder. Datum of gage is 1,462.36 ft (445.727 m) above mean sea level. Prior to Oct. 1, 1914, nonrecording gage at several sites within 4 mi (6 km) of present site at various datums. Oct. 1, 1914, to Oct. 14, 1919, water-stage recorder at site 1.8 mi (2.9 km) downstream at different datum. Nov. 5, 1933, to Oct. 27, 1964, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 40.53 ft (12.354 m) lower. Oct. 28, 1964, to Aug. 27, 1965, nonrecording gage at site 0.6 mi (1.0 km) downstream at different datum.

AVERAGE DISCHARGE.--46 years (1913-19, 1933-73), 422 ft³/s (12.0 m³/s), 48.98 in/yr (1,244 mm/yr), 305,700 acre-ft/yr (377 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,420 ft³/s (40.2 m³/s) Dec. 19, gage height, 3.50 ft (1.067 m); minimum, 107 ft³/s (3.03 m³/s) Sept. 17.

Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) Dec. 22, 1964, gage height, 9.15 ft (2.789 m), from floodmark, site and datum then in use, from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of slope-area measurement of peak flow; minimum, 63 ft³/s (1.78 m³/s) Jan. 8, 1937.

REMARKS.--Records good. No regulation or diversion above station. All records given herein are for measuring cable site.

REVISIONS (WATER YEARS).--WSP 794: 1934(M). WSP 814: Drainage area. WSP 1124: 1935, 1942(M), 1943, 1946(M), WSP 1248: 1915, 1918. WRD 1971 Oreg.: 1968, 1969(M,P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	179	239	405	283	313	365	437	252	172	119	116
2	154	195	235	410	279	300	355	424	242	168	116	116
3	154	235	251	385	271	291	350	428	235	165	116	113
4	151	345	235	350	287	287	349	459	228	158	116	113
5	147	370	219	336	295	279	365	425	221	154	116	110
6	147	291	215	313	300	279	377	409	217	151	116	113
7	144	259	203	295	291	267	366	402	213	151	116	140
8	144	247	200	279	283	263	354	402	208	147	113	125
9	154	239	220	271	279	259	352	393	206	144	113	119
10	223	239	220	271	283	420	359	378	201	137	116	116
11	251	227	220	313	279	437	369	367	195	137	116	113
12	195	215	207	644	283	399	405	372	199	137	116	113
13	207	207	183	1.170	275	384	539	408	207	134	113	110
14	187	203	172	1.070	271	365	492	461	199	134	110	110
15	175	191	172	884	267	351	458	474	203	131	113	110
16	168	183	215	938	263	356	511	461	207	125	113	110
17	165	179	426	822	287	350	649	447	271	125	113	110
18	158	179	866	701	283	343	635	422	255	125	113	113
19	154	179	1.130	602	275	356	637	388	239	125	116	119
20	151	175	1.160	536	267	353	602	355	223	128	113	137
21	151	179	1.060	488	263	351	562	324	215	125	113	131
22	151	179	1.160	440	255	345	572	304	207	125	113	128
23	147	172	1.030	410	251	334	582	296	203	125	113	154
24	144	168	1.060	405	251	328	554	357	199	125	125	255
25	144	187	884	400	255	328	539	370	199	125	128	263
26	147	360	708	365	259	322	550	318	199	122	122	179
27	144	345	656	350	263	318	572	295	183	122	122	154
28	158	304	614	331	271	314	548	280	179	119	119	140
29	154	275	536	318	------	302	506	271	175	119	116	134
30	151	255	482	313	------	331	464	268	175	116	116	128
31	147	------	440	295	------	370	------	262	------	116	116	------
TOTAL	5.025	6.961	15.818	15.110	7.669	10.295	14.338	11.657	6.355	4.187	3.596	3.992
MEAN	162	232	510	487	274	332	478	376	212	135	116	133
MAX	251	370	1.160	1.170	300	437	649	474	271	172	128	263
MIN	144	168	172	271	251	259	349	262	175	116	110	110
CFSM	1.38	1.98	4.36	4.16	2.34	2.84	4.09	3.21	1.81	1.15	.99	1.14
IN.	1.60	2.21	5.03	4.80	2.44	3.27	4.56	3.71	2.02	1.33	1.14	1.27
AC-FT	9.970	13.810	31.380	29.970	15.210	20.420	28.440	23.120	12.610	8.300	7.130	7.920

CAL YR 1972 TOTAL 191.324 MEAN 523 MAX 6.810 MIN 144 CFSM 4.47 IN 60.83 AC-FT 379.500
WTR YR 1973 TOTAL 105.003 MEAN 288 MAX 1.170 MIN 110 CFSM 2.46 IN 33.39 AC-FT 208.300

PEAK DISCHARGE (BASE, 1,700 CFS).--No peak above base.

14146950 WALDO LAKE NEAR OAKRIDGE, OREG.

OCATION.--Lat 43°46'05", long 122°03'10", in SE¼NW¼ sec.7, T.21 S., R.6 E., Lane County, Willamette National Forest, on left bank at head of artificial outlet channel for Waldo Lake, at headwaters of the North Fork of the Middle Fork Willamette River, 20 mi (32 km) east of Oakridge, and at mile 43.51 (70.0 km).

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 5,410 ft (1,649.0 m), from topographic map; gage readings have been reduced to elevations above mean sea level. Present gage is at same site and datum as former gage for Waldo Lake outlet near Oakridge (see sta 14147000) for period 1936-53.

EXTREMES.--Current year: Maximum contents observed, 768,400 acre-ft (947 hm^3) May 29, elevation, 5,411.59 ft (1,649.453 m); minimum observed, 760,500 acre-ft (938 hm^3) Aug. 29, elevation, 5,410.33 ft (1,649.069 m).

Period of record: Maximum contents observed, 778.900 acre-ft (960 hm^3) Mar. 18, 1971, elevation, 5,413.25 ft (1,649.969 m); minimum observed, 760,500 acre-ft (938 hm^3) Aug. 29, 1972, elevation, 5,410.33 ft (1,649.069 m).

REMARKS.--Lake not regulated. Lake level was lowered approximately 0.5 ft (0.2 m) when low rock dam in artificial outlet channel was removed Sept. 23, 1971. Lake outlet is an old artificial outlet channel 30 ft (9 m) below the gage. Diversion tunnel into head of Black Creek, near south end of lake, built about 1914, is not used; but leakage past old control gates was measured at 0.36 ft^3/s (0.010 m^3/s) July 17, 1973. The maximum stage of the lake during period 1936-53 was 5,412.98 ft (1,649.876 m), which occurred Jan. 2, 1943. At times during this period the lake elevation could have been as much as 2 ft (0.6 m) below elevation 5,410 ft (1,649.0 m). A high-water mark noted Sept. 3, 1936, indicated that an elevation of 5,413.2 ft (1,649.94 m) had occurred sometime previous to that date. See station 14147000 for lake elevations for period 1936-53.

COOPERATION.--Waldo Lake bathymetric chart, used to compute capacity table, furnished by Environmental Protection Agency.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)
Oct. 2	5,410.86	763,800
Nov. 17	5,410.76	763,200
May 29	5,411.59	768,400
July 17	5,411.02	764,800
Aug. 29	5,410.33	760,500

14147000 WALDO LAKE OUTLET NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°46'05", long 122°03'10", in SE¼NW¼ sec.7, T.21 S., R.6 E., Lane County, in Willamette National Forest, on right bank of artificial outlet channel of Waldo Lake forming the headwaters of the North Fork of the Middle Fork of Willamette River, 20 mi (32 km) east of Oakridge, and at mile 43.5 (70.0 km).

DRAINAGE AREA.--30.5 mi² (79.0 km²), of which about 10.5 mi² (27.2 km²) is Waldo Lake.

PERIOD OF RECORD.--October 1936 to September 1953, October 1969 to current year.

GAGE.--Water-stage recorder and modified v-notch weir. Altitude of gage is 5,410 ft (1,649 m), from topographic map. October 1936 to September 1953, at site 120 ft (37 m) upstream on left bank at same datum.

AVERAGE DISCHARGE.--21 years, 33.8 ft³/s (0.96 m³/s), 24,490 acre-ft/yr (30.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 46 ft³/s (1.30 m³/s) Jan. 24, gage height, 1.50 ft (0.457 m); no flow Sept. 14-22.
Period of record: Maximum discharge, 150 ft³/s (4.25 m³/s) Jan. 20, 1971, from rating curve extended above 77 ft³/s (2.18 m³/s) and adjusted for overbank flow; maximum gage height, 2.98 ft (0.908 m) Jan. 2, 1943; no flow at times.
A high-water mark in the channel of a previous high stage in the lake was noted on Sept. 3, 1936, as 3.2 ft (0.98 m) gage height, affected by seiche.

REMARKS.--Records good. At times seiches from Waldo Lake cause rapid changes in stage at gage many times each hour. No regulation. Diversion tunnel into head of Black Creek, near south end of lake, built about 1914, is sealed off, but there is leakage of about 0.36 ft³/s (0.010 m³/s) past control gates, measured July 17, 1973.

REVISIONS.--WSP 2135: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.8	9.9	34	41	32	35	32	35	24	9.2	.77
2	9.9	8.1	9.6	34	39	32	35	32	35	23	9.0	.66
3	9.6	8.7	11	34	39	30	33	32	34	23	8.6	.55
4	9.3	9.6	11	33	39	31	33	33	33	22	8.2	.51
5	8.7	11	11	33	38	31	32	33	32	22	7.8	.40
6	8.4	11	11	33	38	31	32	33	32	21	7.4	.32
7	7.8	9.9	11	33	38	30	32	33	32	20	7.1	.49
8	7.5	10	11	32	36	30	30	33	31	20	6.7	.45
9	7.5	10	11	31	36	29	30	33	30	19	6.2	.39
10	8.4	10	10	31	36	32	29	33	29	18	5.9	.31
11	9.9	9.9	9.9	32	36	33	29	32	29	18	5.5	.21
12	9.9	9.6	10	35	36	33	29	32	29	17	5.1	.13
13	11	9.6	10	38	36	35	30	32	29	16	4.7	.02
14	11	9.0	9.9	38	36	34	30	32	28	16	4.4	0
15	11	8.7	9.9	38	35	34	29	32	28	16	4.1	0
16	9.9	8.7	10	40	35	33	30	33	29	15	3.7	0
17	9.9	8.4	12	41	36	36	34	33	31	15	3.4	0
18	9.6	8.1	14	41	35	35	36	34	32	14	3.0	0
19	9.3	8.1	16	42	35	35	38	34	30	14	2.7	0
20	9.0	8.1	19	42	34	35	38	34	30	14	2.4	0
21	8.7	8.1	22	42	33	35	38	34	30	14	2.2	0
22	8.7	8.1	25	42	32	35	36	34	29	13	1.9	0
23	8.4	7.5	27	41	32	34	36	33	29	13	1.7	.21
24	8.1	7.5	30	41	32	33	36	36	28	12	1.7	.58
25	7.5	7.8	31	42	31	33	35	38	27	12	1.6	.97
26	7.3	9.9	30	42	31	32	35	38	27	12	1.5	.89
27	7.3	10	31	42	30	32	34	37	27	11	1.3	.76
28	7.8	10	34	40	30	32	33	37	26	11	1.2	.71
29	8.1	10	33	40	------	32	33	36	26	10	1.2	.66
30	8.1	10	33	41	------	33	32	36	25	9.9	1.1	.58
31	7.5	------	34	41	------	33	------	36	------	9.5	.89	------
TOTAL	275.1	273.2	557.2	1,169	985	1,015	992	1,050	892	494.4	131.39	10.57
MEAN	8.87	9.11	18.0	37.7	35.2	32.7	33.1	33.9	29.7	15.9	4.24	.35
MAX	11	11	34	42	41	36	38	38	35	24	9.2	.97
MIN	7.3	7.5	9.6	31	30	29	29	32	25	9.5	.89	0
AC-FT	546	542	1,110	2,320	1,950	2,010	1,970	2,080	1,770	981	261	21

CAL YR 1972 TOTAL 21,394.50 MEAN 58.5 MAX 143 MIN 7.3 AC-FT 42,440
WTR YR 1973 TOTAL 7,844.86 MEAN 21.5 MAX 42 MIN 0 AC-FT 15,560

14147500 NORTH FORK OF MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°45'25", long 122°30'15", in SW¼ sec.7, T.21 S., R.3 E., Lane County, on left bank 2.5 mi (4.0 km) northwest of Oakridge and at mile 1.0 (1.6 km).

DRAINAGE AREA.--246 mi^2 (637 km^2), at measuring section 0.5 mi (0.8 km) downstream.

PERIOD OF RECORD.--October 1909 to March 1916, September 1935 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to October 1912, published as "near Hazeldell."

GAGE.--Water-stage recorder. Datum of gage is 1,029.6 ft (313.82 m) above mean sea level (river profile survey). Oct. 1, 1909, to Mar. 31, 1916, water-stage recorder or nonrecording gage at several sites within 0.8 mi (1.3 km) of present site at various datums. Sept. 10, 1935, to Oct. 3, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years (1909-15, 1935-73), 788 ft^3/s (22.3 m^3/s), 43.50 in/yr (1,105 mm/yr), 570,900 acre-ft/yr (704 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,220 ft^3/s (91.2 m^3/s) Dec. 19, gage height, 6.02 ft (1.835 m); minimum, 38 ft^3/s (1.08 m^3/s) Aug. 20.

Period of record: Maximum discharge, 24,400 ft^3/s (691 m^3/s) Dec. 22, 1964, gage height, 19.14 ft (5.834 m), from floodmark, from rating curve extended above 7,100 ft^3/s (201 m^3/s) on basis of slope-area measurement of peak flow; minimum, 22 ft^3/s (0.62 m^3/s) Aug. 20, 1966.

REMARKS.--Records excellent. Slight natural regulation by Waldo Lake; occasional fluctuations during low-water periods caused by log-ponds above station. No diversions above station. All records given herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 1248: 1914-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	210	308	835	582	627	681	713	350	236	150	125
2	157	308	305	840	569	618	663	681	340	230	150	125
3	160	301	362	780	551	600	650	677	329	227	148	123
4	160	482	329	704	596	578	641	735	315	221	148	123
5	154	551	298	663	641	555	659	690	305	218	145	118
6	154	398	298	618	650	560	672	654	298	218	145	118
7	151	333	277	569	618	542	650	636	287	212	145	148
8	151	319	207	533	591	528	618	641	280	209	143	148
9	151	298	220	515	578	515	609	632	277	209	140	133
10	224	333	240	502	587	790	609	600	270	206	168	128
11	301	315	240	623	578	870	618	573	263	200	155	123
12	228	284	240	1,280	569	780	641	569	259	197	138	123
13	242	266	240	2,530	542	749	825	596	277	191	135	120
14	235	252	228	2,230	528	708	753	632	263	183	133	123
15	200	231	224	1,770	519	672	699	641	270	183	130	120
16	186	228	280	1,850	506	668	753	623	284	178	130	118
17	179	221	1,420	1,680	546	659	1,130	600	414	178	130	118
18	172	221	1,820	1,450	555	636	1,100	564	402	175	130	128
19	163	231	2,410	1,230	542	668	1,120	528	350	173	128	145
20	163	235	2,520	1,080	519	659	1,050	490	326	180	120	188
21	160	228	2,380	975	502	650	970	454	308	178	88	168
22	160	231	2,520	880	494	636	998	430	294	173	110	170
23	160	221	2,340	820	482	609	1,010	414	287	170	125	239
24	157	217	2,540	785	474	600	950	502	277	168	140	462
25	157	217	2,010	790	494	596	920	578	277	165	163	551
26	163	446	1,570	722	502	587	925	486	298	163	143	305
27	160	458	1,490	686	528	578	940	446	273	163	128	233
28	182	394	1,420	654	528	582	895	418	259	160	133	203
29	189	366	1,180	627	------	560	825	394	249	158	130	183
30	179	333	1,030	623	------	600	758	374	242	155	128	175
31	172	------	930	618	------	699	------	362	------	153	128	------
TOTAL	5,539	9,128	31,876	30,462	15,371	19,679	24,332	17,333	8,923	5,830	4,227	5,284
MEAN	179	304	1,028	983	549	635	811	559	297	188	136	176
MAX	301	551	2,540	2,530	650	870	1,130	735	414	236	168	551
MIN	151	210	207	502	474	515	609	362	242	153	88	118
CFSM	.73	1.24	4.18	4.00	2.23	2.58	3.30	2.27	1.21	.76	.55	.72
IN.	.84	1.38	4.82	4.61	2.32	2.98	3.68	2.62	1.35	.88	.64	.80
AC-FT	10,990	18,110	63,230	60,420	30,490	39,030	48,260	34,380	17,700	11,560	8,380	10,480

CAL YR 1972 TOTAL 391,412 MEAN 1,069 MAX 10,100 MIN 148 CFSM 4.35 IN 59.19 AC-FT 776,400
WTR YR 1973 TOTAL 177,984 MEAN 488 MAX 2,540 MIN 88 CFSM 1.98 IN 26.91 AC-FT 353,000

PEAK DISCHARGE (BASE, 3,500 CFS).--No peak above base.

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OREG.

LOCATION.--Lat 43°48'05", long 122°33'35", in SW¼ sec.27, T.20 S., R.2 E., Lane County, on left bank 0.5 mi (0.8 km) downstream from Whitehead Creek, 4.2 mi (6.8 km) downstream from North Fork of Middle Fork Willamette River, 7.0 mi (11.3 km) northwest of Oakridge, and at mile 220.2 (354.3 km).

DRAINAGE AREA.--924 mi² (2,393 km²).

PERIOD OF RECORD.--March 1911 to September 1912, July 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "near Hazeldell" 1911-12 and as "at Eula" 1923-50.

GAGE.--Water-stage recorder. Datum of gage is 934.76 ft (284.915 m) above mean sea level. Mar. 22, 1911, to Sept. 30, 1912, nonrecording gage at site 4.0 mi (6.4 km) upstream, just below North Fork at different datum. July 1, 1923, to Aug. 11, 1935, nonrecording gage and Aug. 12, 1935, to Sept. 30, 1950, water-stage recorder at site 4.0 mi (6.4 km) downstream at different datum.

AVERAGE DISCHARGE.--51 years, 2,750 ft³/s (77.9 m³/s), 1,992,000 acre-ft/yr (2.46 km³/yr).

EXTREMES.--Current year: Maximum discharge, 7,080 ft³/s (201 m³/s) Dec. 24, gage height, 4.45 ft (1.356 m); minimum, 820 ft³/s (23.2 m³/s) Aug. 1-4.

Period of record: Maximum discharge, 81,800 ft³/s (2,320 m³/s) Dec. 28, 1945, gage height, 18.8 ft (5.73 m), from floodmark, site and datum then in use, from rating curve extended above 39,000 ft³/s (1,100 m³/s); minimum, 322 ft³/s (9.12 m³/s) Aug. 30, 1961, caused by closing outlet gates at Hills Creek Dam.

Maximum stage since 1861 and prior to beginning of record, 17.0 ft (5.18 m) in February 1890 at site used 1923-50, from information by local resident, discharge, about 55,000 ft³/s (1,560 m³/s).

REMARKS.--Records excellent. Flow regulated since 1961 by Hills Creek Lake (see station 14145100); slight regulation at times by log-ponds above station. No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 694: 1925-28. WSP 814: Drainage area at Eula. WSP 1248: 1924, 1925(M), 1926-28, 1929(M), 1930, 1933, 1946(M). WSP 1398: 1927(M). WSP 1638: 1936(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.980	1.600	1.630	3.200	1.570	1.550	1.830	1.830	1.150	1.030	830	1.090
2	1.980	1.760	1.900	3.020	1.500	1.530	1.800	1.780	1.100	1.010	830	1.080
3	1.980	2.250	2.560	2.720	1.460	1.480	1.740	1.790	1.070	998	820	1.090
4	2.000	2.720	2.480	2.500	1.530	1.460	1.720	1.940	1.060	985	908	1.090
5	1.980	2.890	2.400	2.290	1.590	1.420	1.750	1.830	1.060	978	932	1.080
6	1.980	2.560	2.400	2.070	1.610	1.430	1.770	1.760	1.050	972	1.020	1.080
7	1.980	2.460	2.340	1.950	1.550	1.400	1.700	1.690	1.040	973	1.030	1.170
8	1.980	2.440	2.220	1.870	1.490	1.270	1.620	1.700	1.070	965	1.020	1.160
9	2.000	2.400	2.220	2.050	1.480	1.170	1.600	1.750	1.110	951	1.020	1.110
10	2.130	2.070	2.230	2.320	1.480	1.900	1.600	1.650	1.090	940	1.020	1.100
11	2.180	1.970	2.910	2.480	1.460	2.090	1.620	1.590	1.080	940	1.050	1.090
12	2.000	1.920	4.580	3.900	1.460	1.890	1.680	1.580	1.070	935	1.000	1.090
13	2.040	1.890	3.800	6.240	1.420	1.840	2.120	1.670	1.110	923	1.000	1.090
14	1.510	1.700	2.070	5.570	1.390	1.750	1.970	1.750	1.080	910	1.580	1.090
15	1.370	1.630	1.680	4.600	1.390	1.690	1.860	1.750	1.100	905	1.700	1.090
16	1.630	1.620	1.600	5.540	1.360	1.700	1.980	1.860	1.130	897	1.730	1.080
17	1.890	1.680	3.780	5.900	1.430	1.710	2.750	1.820	1.400	895	1.730	1.370
18	1.860	1.710	4.630	5.270	1.450	1.650	2.730	1.750	1.330	883	1.760	1.900
19	1.840	1.730	5.480	5.150	1.420	1.660	2.870	1.640	1.160	896	1.760	1.960
20	1.840	1.650	6.140	4.200	1.370	1.590	2.730	1.530	1.090	1.080	1.780	2.020
21	1.370	1.420	6.200	4.000	1.330	1.740	2.510	1.420	1.050	1.360	1.780	1.980
22	1.310	1.440	6.690	3.600	1.310	1.710	2.520	1.340	1.030	977	1.810	2.000
23	1.310	1.440	6.140	3.250	1.280	1.630	2.520	1.300	1.120	939	1.630	2.090
24	1.300	1.440	6.590	3.050	1.260	1.590	2.360	1.520	1.100	884	1.110	2.500
25	1.480	1.440	5.630	3.020	1.300	1.580	2.280	1.710	1.050	872	1.160	2.680
26	1.510	1.900	4.680	2.660	1.320	1.550	2.270	1.470	1.020	860	1.110	2.230
27	1.520	1.970	4.500	1.840	1.350	1.530	2.320	1.360	982	860	1.090	2.110
28	1.570	1.820	4.000	1.730	1.350	1.550	2.230	1.290	956	850	1.090	2.050
29	1.570	1.760	3.750	1.660	------	1.500	2.080	1.230	1.030	840	1.090	2.020
30	1.540	1.680	3.750	1.620	------	1.590	1.930	1.200	1.040	840	1.460	2.020
31	1.540	------	3.500	1.600	------	1.860	------	1.190	------	840	1.520	------
TOTAL	54.170	56.960	114.480	100.870	39.910	50.010	62.460	49.690	32.728	29.188	39.370	46.490
MEAN	1.747	1.899	3.693	3.254	1.425	1.613	2.082	1.603	1.091	942	1.270	1.550
MAX	2.180	2.890	6.690	6.240	1.610	2.090	2.870	1.940	1.400	1.360	1.810	2.680
MIN	1.300	1.420	1.600	1.600	1.260	1.170	1.600	1.190	956	840	820	1.080
AC-FT	107.400	113.000	227.100	200.100	79.160	99.190	123.900	98.560	64.920	57.890	78.090	92.210

CAL YR 1972 TOTAL 1.397.600 MEAN 3.819 MAX 21.000 MIN 1.060 AC-FT 2.772.000
WTR YR 1973 TOTAL 676.326 MEAN 1.853 MAX 6.690 MIN 820 AC-FT 1.341.000

14149000 LOOKOUT POINT LAKE NEAR LOWELL, OREG.

LOCATION.--Lat 43°54'50", long 122°45'00", SE¼ sec.13, T.19 S., R.1 W., Lane County, in elevator house at right end of spillway section of dam on Middle Fork Willamette River, 1.5 mi (2.4 km) east of Lowell, and at mile 206.9 (332.9 km).

DRAINAGE AREA.--991 mi^2 (2,567 km^2).

PERIOD OF RECORD.--November 1953 to current year. Prior to October 1971, published as Lookout Point Reservoir near Lowell.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Nov. 7, 1953, to Dec. 4, 1954, approximate elevations obtained from reference marks and Dec. 5, 1954, to Feb. 4, 1955, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents during year, 336,900 acre-ft (415 hm^3) June 7, elevation, 899.47 ft (274.158 m); minimum, 107,000 acre-ft (132 hm^3) Dec. 13, elevation, 819.20 ft (249.692 m).

Period of record: Maximum contents, 464,900 acre-ft (573 hm^3) Dec. 26, 1964, elevation, 931.03 ft (283.796 m); minimum observed since first filling, 91,450 acre-ft (113 hm^3) Dec. 1, 1954, elevation, 811.00 ft (247.193 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1954 by Corps of Engineers. Planned storage began in November 1953. Total capacity is 455,800 acre-ft (562 hm^3) at elevation 929 ft (283.2 m), proposed lower limit of operation, and usable capacity is 349,200 acre-ft (431 hm^3) between elevations 819 ft (249.6 m), and 929 ft (283.2 m), top of spillway gates. Reservoir used for flood control, improvement of navigation, power generation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

820	108,600	860	205,500	900	338,900
830	129,500	870	235,500	910	377,400
840	152,500	880	267,800	920	417,800
850	117,700	890	302,300	930	460,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287,600	238,600	138,500	118,100	133,600	150,800	187,800	273,800	335,800	331,800	296,100	246,300
2	285,500	235,700	135,200	118,800	134,400	151,500	188,500	277,300	335,900	331,300	294,500	244,400
3	284,600	235,500	133,200	119,300	135,100	152,600	187,900	280,900	335,900	330,500	293,000	242,600
4	283,900	235,100	129,600	119,200	136,100	153,200	189,400	283,700	336,000	329,900	291,600	240,300
5	283,200	235,100	124,500	119,100	137,000	153,800	190,900	286,200	336,000	329,200	290,100	238,400
6	282,600	233,600	120,000	119,200	138,000	154,500	192,300	288,600	335,900	328,400	287,700	237,000
7	282,200	230,300	115,000	119,100	138,900	155,100	193,500	290,900	336,000	327,700	286,200	236,100
8	282,200	227,600	110,000	118,900	139,600	155,400	194,600	293,100	335,600	327,100	284,800	235,200
9	281,800	225,800	110,300	117,900	140,100	155,500	195,500	295,300	335,400	326,000	282,400	234,600
10	281,900	222,600	110,800	117,500	140,900	157,300	198,000	297,300	335,100	325,200	280,900	233,700
11	282,100	219,400	109,500	118,300	141,500	159,600	200,600	299,200	334,400	324,200	279,300	233,600
12	281,900	216,500	109,400	121,200	142,200	161,200	203,300	301,400	334,200	323,500	277,700	233,200
13	281,800	213,100	109,000	128,800	142,800	162,700	206,800	304,200	334,000	322,800	275,600	232,700
14	281,300	208,600	110,600	136,100	143,400	164,200	210,000	306,800	333,900	322,000	275,100	232,100
15	280,300	203,900	111,400	136,200	143,900	164,400	213,100	309,100	333,600	320,800	274,900	232,600
16	279,300	198,800	112,000	137,200	144,300	165,700	216,400	311,600	333,700	319,400	273,200	233,000
17	278,300	193,900	117,700	134,500	145,000	167,000	221,300	313,900	333,900	317,900	271,300	231,900
18	277,200	189,900	123,400	130,200	145,700	168,100	226,000	315,000	334,400	316,400	269,800	233,100
19	276,100	186,200	124,600	126,600	146,300	169,500	231,000	317,100	334,700	314,900	267,800	234,400
20	275,000	182,200	128,000	127,700	146,700	170,900	235,600	318,800	334,800	313,800	269,300	236,400
21	272,900	177,400	130,600	128,400	147,100	172,400	240,100	320,200	334,900	313,100	265,000	237,600
22	270,600	173,100	134,600	128,200	147,500	173,900	244,200	321,600	334,800	311,900	263,200	238,800
23	268,500	168,900	137,400	127,700	147,700	175,100	248,300	323,100	334,200	310,500	261,200	240,400
24	265,900	164,800	141,200	127,900	148,800	176,100	252,000	325,100	334,000	309,000	259,800	243,000
25	262,500	160,500	142,500	128,200	148,300	178,500	255,500	327,400	334,000	307,500	258,200	245,400
26	259,400	157,600	139,000	127,600	148,700	178,200	258,900	329,100	333,900	306,000	256,500	247,400
27	255,900	154,400	136,500	128,800	149,200	178,800	262,300	330,500	333,500	304,200	254,800	248,700
28	252,700	150,300	129,800	129,800	149,600	179,800	265,700	331,900	333,300	302,900	253,000	250,200
29	249,700	146,500	125,300	130,700	------	180,100	268,700	333,100	332,700	301,100	251,300	251,600
30	246,500	142,600	123,300	131,700	------	181,400	271,400	334,100	332,300	299,000	249,100	253,000
31	243,300	------	120,900	132,800	------	184,600	------	335,200	------	297,600	248,000	------
MAX	287,600	238,600	142,500	137,200	149,600	184,600	271,400	335,200	336,000	331,800	296,100	253,000
MIN	243,300	142,600	109,000	117,500	133,600	150,800	187,800	273,800	332,300	297,600	248,000	231,900
(†)	872.46	835.82	836.04	831.50	838.82	852.57	88[illegible].06	899.02	898.23	888.66	873.95	875.50
(‡)	-44,200	-100,700	-21,700	+11,900	+16,800	+35,000	+86,800	+63,800	-2,900	-34,700	-49,600	+5,000

CAL YR 1972 MAX 445,800 MIN 109,000 AC-FT ‡ + 7,600
WTR YR 1973 MAX 336,000 MIN 109,000 AC-FT ‡ -34,500

† Elevation, in feet, at end of month.
‡ Cahnge in contents, in acre-feet.

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OREG.

LOCATION.--Lat 43°56'45", long 122°50'10", in SE¼NW¼ sec.5, T.19 S., R.1 W., Lane County, on right bank 0.6 mi (1.0 km) upstream from Lost Creek, 2.0 mi (3.2 km) northwest of Dexter, 2.6 mi (4.2 km) downstream from Dexter Dam, and at mile 201.2 (323.7 km).

DRAINAGE AREA.--1,001 mi^2 (2,593 km^2).

PERIOD OF RECORD.--October 1946 to September 1954 (published as "at Lowell"), June 1955 to current year. Monthly discharge only for October 1954 to June 1955, published in WSP 1738.

GAGE.--Water-stage recorder. Datum of gage is 595.30 ft (181.447 m) above mean sea level (levels by Corps of Engineers). Prior to Aug. 23, 1950, nonrecording gage and Aug. 23, 1950, to Sept. 30, 1954, at site 4.0 mi (6.4 km) upstream at different datum.

AVERAGE DISCHARGE.--27 years, 3,204 ft^3/s (90.7 m^3/s), 2,321,000 acre-ft/yr (2.86 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,540 ft^3/s (242 m^3/s) Dec. 27, gage height, 5.33 ft (1.625 m); minimum, 515 ft^3/s (14.6 m^3/s) Apr. 26, but may have been less during period Apr. 28 to June 1.

Period of record: Maximum discharge, 62,600 ft^3/s (1,770 m^3/s) Jan. 18, 1953, gage height, 12.46 ft (3.798 m), site and datum then in use, from rating curve extended above 33,000 ft^3/s (935 m^3/s); minimum daily, 100 ft^3/s (2.83 m^3/s) Nov. 25, 1960.

Maximum stage, 13.9 ft (4.24 m) Dec. 28, 1945, former site and datum.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Flow regulated since 1953 by Lookout Point Lake (see station 14149000) and since 1961 by Hills Creek Lake (see station 14145100). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1638: 1948(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,990	3,860	3,560	4,800	1,020	1,180	1,130	550	800	1,240	1,640	1,950
2	2,650	3,240	3,630	3,550	1,020	1,120	1,190	550	964	1,240	1,600	1,950
3	2,[illegible]50	2,620	3,690	2,500	1,210	1,120	1,170	550	980	1,310	1,600	1,950
4	2,010	3,170	4,290	2,510	1,140	1,120	1,140	600	1,000	1,290	1,680	1,970
5	2,050	2,980	4,870	2,420	1,100	1,120	1,130	600	1,020	1,310	1,740	1,970
6	2,180	3,370	5,120	1,920	1,180	1,100	1,120	550	1,030	1,320	1,880	1,800
7	2,060	3,670	4,800	1,890	1,180	1,100	1,100	550	1,030	1,330	1,890	1,650
8	2,000	3,660	4,430	1,840	1,130	1,110	1,100	550	1,230	1,320	1,890	1,300
9	2,080	3,690	2,350	2,510	1,130	1,160	1,040	550	1,260	1,330	1,890	1,280
10	2,130	3,720	2,340	2,410	1,100	1,180	650	550	1,240	1,330	1,770	1,260
11	2,210	3,720	3,530	2,170	1,090	1,170	650	550	1,260	1,330	1,890	1,040
12	1,960	3,780	4,660	2,220	1,110	1,170	650	550	1,180	1,320	1,870	1,190
13	1,950	3,700	3,730	3,480	1,110	1,170	650	550	1,040	1,320	1,920	1,300
14	2,060	3,850	1,460	2,040	1,110	1,180	650	550	1,050	1,330	1,900	1,320
15	2,090	3,820	1,260	5,140	1,100	1,190	650	550	1,190	1,320	1,890	1,330
16	2,120	3,820	1,250	5,000	1,100	1,160	650	550	1,270	1,440	2,580	1,320
17	2,020	3,780	1,230	7,970	1,100	1,160	700	550	1,260	1,560	2,630	1,320
18	2,050	3,800	1,850	7,990	1,110	1,160	700	550	1,150	1,660	2,610	1,290
19	2,020	3,810	5,760	7,990	1,110	1,170	700	550	1,050	1,620	2,610	1,290
20	2,320	3,810	5,090	3,910	1,110	1,190	650	550	1,040	1,560	2,610	1,290
21	2,390	3,750	5,140	3,750	1,070	1,150	650	550	1,040	1,[illegible]30	2,610	1,280
22	2,250	3,600	5,480	3,750	1,070	1,150	600	550	1,050	1,630	2,640	1,290
23	2,240	3,490	5,630	3,760	1,070	1,140	600	600	1,300	1,620	2,630	1,280
24	2,470	3,470	5,870	2,980	1,070	1,150	550	650	1,290	1,640	1,870	1,290
25	2,820	3,480	5,550	2,960	1,070	1,140	550	650	1,170	1,650	1,840	1,280
26	2,850	3,530	6,830	2,950	1,100	1,140	515	650	1,070	1,650	1,840	1,240
27	3,320	3,470	6,510	1,400	1,180	1,130	534	650	1,080	1,650	1,800	1,210
28	3,190	3,760	8,010	1,220	1,170	1,170	550	650	1,080	1,640	1,890	1,190
29	2,880	3,750	6,180	1,200	------	1,160	550	650	1,270	1,640	1,940	1,190
30	3,030	3,730	5,140	1,170	------	1,150	550	650	1,240	1,640	2,420	1,200
31	3,190	------	4,810	1,090	------	1,140	------	700	------	1,650	1,980	------
TOTAL	73,730	107,890	134,050	100,490	31,060	35,650	23,069	18,050	33,634	45,470	63,550	42,220
MEAN	2,378	3,596	4,324	3,242	1,109	1,150	769	582	1,121	1,467	2,050	1,407
MAX	3,320	3,860	8,010	7,990	1,210	1,190	1,190	700	1,300	1,660	2,640	1,970
MIN	1,950	2,620	1,230	1,090	1,020	1,100	515	550	800	1,240	1,600	1,040
AC-FT	146,200	214,000	265,900	199,300	61,610	70,710	45,760	35,800	66,710	90,190	126,100	83,740

CAL YR 1972 TOTAL 1,477,651 MEAN 4,037 MAX 11,600 MIN 751 AC-FT 2,931,000
WTR YR 1973 TOTAL 708,863 MEAN 1,942 MAX 8,010 MIN 515 AC-FT 1,406,000

NOTE.--No gage-height record, Apr. 28 to June 1.

14150300 FALL CREEK NEAR LOWELL, OREG.

LOCATION.--Lat 43°58'15", long 122°38'15", in SW¼ sec.25, T.18 S., R.1 E., Lane County, on right bank 0.1 mi (0.2 km) downstream from North Fork, 8.0 mi (12.9 km) northeast of Lowell, and at mile 14.4 (23.2 km).

DRAINAGE AREA.--118 mi^2 (306 km^2).

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 844.42 ft (257.379 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 411 ft^3/s (11.6 m^3/s), 47.30 in/yr (1,201 mm/yr), 297,800 acre-ft/yr (367 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,210 ft^3/s (62.6 m^3/s) Dec. 17, gage height, 5.25 ft (1.600 m); minimum, 21 ft^3/s (0.59 m^3/s) Sept. 6.
Period of record: Maximum discharge, 12,100 ft^3/s (343 m^3/s) Jan. 21, 1972, which may have been caused by release from breakup of temporary logjam 12 mi (19 km) upstream, gage height, 11.84 ft (3.609 m); minimum, 16 ft^3/s (0.45 m^3/s) Oct. 3, 4, 1965.

REMARKS.--Records excellent. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	63	107	450	313	377	562	225	94	70	32	24
2	32	158	118	565	296	401	592	211	91	68	31	24
3	30	148	240	505	274	347	533	206	88	64	31	23
4	30	294	180	414	338	326	465	219	85	61	30	23
5	28	346	140	362	356	316	424	197	81	60	30	22
6	27	177	128	306	341	337	376	181	77	59	30	21
7	27	123	110	266	301	314	324	178	75	57	30	55
8	27	158	100	237	266	314	287	194	73	54	29	40
9	27	128	95	225	249	297	262	185	72	53	28	30
10	45	155	90	216	249	981	244	167	70	52	29	27
11	93	133	90	362	242	919	231	156	68	50	28	24
12	57	103	95	1,070	226	668	224	150	69	50	28	23
13	73	89	90	1,420	207	586	250	145	75	48	27	23
14	73	79	85	944	197	532	219	141	78	47	25	22
15	48	71	80	675	189	467	201	133	81	45	25	22
16	40	63	340	860	177	468	277	125	108	44	24	22
17	39	59	1,780	785	220	477	733	119	333	43	25	22
18	36	71	1,230	640	249	444	773	114	283	42	25	30
19	34	93	1,200	525	228	512	915	110	175	41	24	39
20	33	97	1,080	446	208	549	834	106	135	44	24	91
21	31	87	920	480	192	528	716	102	114	45	24	77
22	31	89	1,220	426	178	516	716	99	104	43	24	75
23	31	79	1,100	382	166	455	631	102	98	41	23	177
24	30	75	1,930	386	161	415	505	185	92	40	32	490
25	30	71	1,390	465	167	386	431	260	98	39	48	434
26	40	326	800	402	165	343	386	161	120	38	34	168
27	40	262	952	358	175	325	346	133	93	37	29	105
28	75	180	1,060	322	189	332	301	119	84	36	27	77
29	91	148	780	306	------	311	268	111	77	35	26	65
30	61	123	610	308	------	370	243	104	74	33	25	57
31	49	------	550	344	------	619	------	99	------	32	25	------
TOTAL	1,342	4,048	18,690	15,452	6,519	14,232	13,269	4,737	3,165	1,471	872	2,332
MEAN	43.3	135	603	498	233	459	442	153	106	47.5	28.1	77.7
MAX	93	346	1,930	1,420	356	981	915	260	333	70	48	490
MIN	27	59	80	216	161	297	201	99	68	32	23	21
CFSM	.37	1.14	5.11	4.22	1.97	3.89	3.75	1.30	.90	.40	.24	.66
IN.	.42	1.28	5.89	4.87	2.06	4.49	4.18	1.49	1.00	.46	.27	.74
AC-FT	2,660	8,030	37,070	30,650	12,930	28,230	26,320	9,400	6,280	2,920	1,730	4,630

CAL YR 1972 TOTAL 192,022 MEAN 525 MAX 8,190 MIN 22 CFSM 4.45 IN 60.54 AC-FT 380,900
WTR YR 1973 TOTAL 86,129 MEAN 236 MAX 1,930 MIN 21 CFSM 2.00 IN 27.15 AC-FT 170,800

PEAK DISCHARGE (BASE, 3,500 CFS).--No peak above base.

14150800 WINBERRY CREEK NEAR LOWELL, OREG.

LOCATION.--Lat 43°54'50", long 122°41'15", in NE¼SE¼ sec.16, T.19 S., R.1 E., Lane County, on right bank 0.9 mi (1.4 km) upstream from Nelson Creek, 4.6 mi (7.4 km) east of Lowell, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--43.9 mi² (113.7 km²).

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 863.70 ft (263.256 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--10 years, 119 ft³/s (3.37 m³/s), 36.81 in/yr (935 mm/yr), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 505 ft³/s (14.3 m³/s) Dec. 17, gage height, 3.01 ft (0.917 m); minimum, 3.1 ft³/s (0.088 m³/s) Sept. 5, 6.

Period of record: Maximum discharge, 4,500 ft³/s (127 m³/s) Dec. 22, 1964, gage height, 8.07 ft (2.460 m); minimum, 1.5 ft³/s (0.042 m³/s) Sept. 4, 5, 8-10, 1967.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	18	45	136	72	110	242	72	22	14	5.4	3.9
2	6.2	32	42	193	69	102	245	66	20	13	5.2	3.4
3	5.9	32	60	178	65	94	212	64	19	13	5.2	3.3
4	5.7	75	50	140	72	90	190	70	18	12	5.2	3.3
5	5.4	96	42	116	78	86	183	63	17	11	5.2	3.1
6	5.2	52	38	94	78	90	158	57	15	11	5.0	3.1
7	5.2	36	31	80	72	84	130	57	15	11	5.2	11
8	5.2	39	28	68	65	80	110	55	14	11	5.0	7.9
9	5.2	32	26	62	60	77	100	53	14	10	4.8	5.4
10	14	37	24	58	60	180	92	49	13	9.4	5.0	4.4
11	27	32	28	100	57	209	89	46	13	9.1	4.6	3.8
12	17	25	30	274	53	173	84	44	13	8.7	4.4	3.4
13	27	21	24	406	49	163	96	43	15	8.8	4.2	3.3
14	23	18	20	299	46	158	84	41	14	8.5	4.0	3.8
15	13	16	20	218	46	150	75	39	18	8.0	3.8	3.8
16	10	14	85	281	43	158	89	36	20	7.8	3.8	3.4
17	9.0	13	360	251	58	168	190	33	67	7.4	4.0	4.0
18	8.2	14	320	195	68	155	236	30	73	7.3	4.0	5.2
19	7.6	18	342	150	65	178	299	28	47	7.1	4.0	6.7
20	7.3	19	316	126	58	198	316	26	36	7.6	4.0	13
21	7.0	19	260	118	53	193	264	25	30	7.9	4.0	9.0
22	7.0	21	271	104	50	185	252	23	27	7.7	4.0	9.4
23	6.7	18	257	92	46	163	222	24	25	7.0	4.2	23
24	6.5	18	426	89	44	146	178	46	22	6.6	5.9	96
25	6.5	17	342	94	44	136	153	77	22	6.6	10	104
26	9.8	136	221	84	45	120	139	48	25	6.3	6.5	41
27	9.8	108	215	80	47	114	125	38	20	6.1	5.2	24
28	14	75	242	74	53	136	108	33	18	6.1	4.4	17
29	21	69	212	71	------	144	92	29	16	5.7	4.0	14
30	15	55	170	72	------	178	81	26	15	5.4	4.0	12
31	12	------	160	78	------	267	------	24	------	5.4	4.0	------
TOTAL	328.6	1.175	4.707	4.381	1.616	4.485	4.834	1.365	703	266.5	148.2	449.5
MEAN	10.6	39.2	152	141	57.7	145	161	44.0	23.4	8.60	4.78	15.0
MAX	27	136	426	406	78	267	316	77	73	14	10	104
MIN	5.2	13	20	58	43	77	75	23	13	5.4	3.8	3.1
CFSM	.24	.89	3.46	3.21	1.31	3.30	3.67	1.00	.53	.20	.11	.34
IN.	.28	1.00	3.99	3.71	1.37	3.80	4.10	1.16	.60	.23	.13	.38
AC-FT	652	2.330	9.340	8.690	3.210	8.900	9.590	2.710	1.390	529	294	890

CAL YR 1972 TOTAL 52.200.8 MEAN 143 MAX 2.690 MIN 3.8 CFSM 3.26 IN 44.23 AC-FT 103.500
WTR YR 1973 TOTAL 24.457.8 MEAN 67.0 MAX 426 MIN 3.1 CFSM 1.53 IN 20.73 AC-FT 48.510

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

14150900 FALL CREEK LAKE NEAR LOWELL, OREG.

LOCATION.--Lat 43°56'40", long 122°45'20", in SW¼ sec.1, T.19 S., R.1 W., Lane County, in regulating tower near the center of Fall Creek Dam on Fall Creek, 2.2 mi (3.5 km) northeast of Lowell, and at mile 7.2 (11.6 km).

DRAINAGE AREA.--184 mi^2 (477 km^2).

PERIOD OF RECORD.--January 1966 to current year. Prior to October 1971, published as Fall Creek Reservoir near Lowell.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 118,500 acre-ft (146 hm^3) May 29 to June 1; maximum elevation, 830.38 ft (253.100 m) May 30; minimum, no contents Nov. 18-25, elevation, 672.00 ft (204.826 m).

Period of record: Maximum contents, 123,200 acre-ft (152 hm^3) May 30, 31, 1972; maximum elevation, 832.98 ft (253.892 m) May 31, 1972; minimum, no contents Nov. 7 to Dec. 6, 1969, Nov. 14-16, 1970, Nov. 18-25, 1972.

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1965 by Corps of Engineers; storage began January 1966. Total capacity is 125,100 acre-ft (154 hm^3), at elevation 834 ft (254.2 m), proposed lower limit of operation, and usable capacity is 115,500 acre-ft (142 hm^3) between elevation 728 ft (221.9 m) and 834 ft (254.2 m). Reservoir used for flood control, conservation, and recreation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

670.4	0	725	8,340	785	53,120
679	59	735	13,270	795	64,590
685	366	745	19,480	805	77,880
695	1,400	755	26,130	815	97,750
705	2,850	765	33,770	825	109,200
715	5,200	775	42,580	833	123,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.340	17.530	325	9.560	17.620	34.080	75.030	111.800	118.500	117.100	113.500	108.500
2	38.130	16.230	382	9.860	18.390	35.160	77.300	112.300	118.400	117.000	113.300	108.300
3	38.000	14.930	906	9.820	19.150	36.100	78.910	112.700	118.400	116.900	113.100	108.100
4	37.870	13.950	1.210	9.600	20.030	36.970	80.300	113.200	118.400	116.800	112.900	107.900
5	37.720	12.720	1.380	9.570	20.950	37.810	81.560	113.700	118.200	116.700	112.800	107.700
6	37.580	11.330	1.500	9.550	21.820	38.800	82.630	114.100	118.100	116.700	112.600	107.500
7	37.430	10.020	1.530	9.660	22.530	39.620	83.570	114.500	117.900	116.600	112.500	107.300
8	37.250	8.890	1.430	9.820	23.260	40.450	84.340	114.900	117.800	116.500	112.300	107.000
9	37.110	7.750	1.380	9.890	23.910	41.210	84.990	115.300	117.600	116.400	112.200	106.800
10	37.050	6.760	1.330	9.900	24.510	43.560	85.930	115.600	117.500	116.300	112.000	106.500
11	37.060	5.780	1.280	10.210	25.130	46.030	86.510	115.900	117.300	116.200	111.800	106.300
12	37.020	4.670	1.280	10.750	25.690	47.930	87.080	116.200	117.100	116.100	111.700	106.000
13	37.020	3.460	1.270	12.630	26.150	49.670	87.700	116.500	117.100	116.000	111.500	105.600
14	37.010	2.320	1.220	14.560	26.620	51.210	88.250	116.700	116.900	115.900	111.300	105.400
15	36.920	1.100	1.200	13.380	27.060	52.580	88.750	116.900	116.800	115.800	111.200	105.100
16	36.810	59	1.490	13.460	27.470	53.930	89.340	117.000	116.800	115.700	111.000	104.800
17	36.680	59	4.400	13.410	28.030	55.320	91.210	117.100	117.400	115.500	110.800	104.100
18	36.540	0	4.890	12.770	28.660	56.590	93.430	117.100	117.600	115.400	110.600	103.000
19	36.410	0	5.440	12.350	29.240	58.100	96.040	117.100	117.900	115.300	110.400	102.100
20	35.470	0	6.270	12.370	29.770	59.880	98.610	117.200	118.000	115.200	110.200	101.200
21	33.940	0	6.660	12.460	30.190	61.410	100.700	117.200	118.000	115.100	110.100	100.100
22	32.410	0	7.500	12.530	30.620	62.880	102.700	117.200	117.900	114.900	109.900	99.250
23	30.900	0	8.180	12.680	30.990	64.210	104.500	117.300	117.900	114.800	109.700	98.550
24	29.280	0	11.020	12.730	31.370	65.380	105.900	117.600	117.800	114.700	109.700	98.710
25	27.730	0	12.960	12.950	31.770	66.460	107.100	118.100	117.800	114.500	109.600	98.660
26	26.230	503	13.090	13.340	32.170	67.380	108.100	118.200	117.800	114.400	109.500	97.980
27	24.750	507	13.730	13.940	32.580	68.350	109.300	118.400	117.600	114.200	109.300	96.940
28	23.390	78	13.240	14.480	33.060	69.310	110.000	118.400	117.500	114.100	109.100	95.440
29	21.990	87	12.000	15.100	------	70.290	110.700	118.500	117.400	113.900	109.000	94.120
30	20.520	271	10.190	15.880	------	71.450	111.300	118.500	117.200	113.800	108.800	92.110
31	19.010	------	9.610	16.790	------	73.280	------	118.500	------	113.700	108.700	------
MAX	38.340	17.530	13.730	16.790	33.060	73.280	111.300	118.500	118.500	117.100	113.500	108.500
MIN	19.010	0	325	9.550	17.620	34.080	75.030	111.800	116.800	113.700	108.700	92.110
(†)	744.26	683.53	727.97	740.80	764.12	800.99	826.23	830.37	829.67	827.61	824.70	814.59
(‡)	-20,010	-18,740	+9,340	+7,180	+16,270	+40,220	+38,020	+7,200	-1,300	-3,500	-5,000	-16,590

CAL YR 1972 MAX 123.200 MIN 0 AC-FT ‡ + 9,610
WTR YR 1973 MAX 118.500 MIN 0 AC-FT ‡ +53,090

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OREG.

LOCATION.--Lat 43°56'40", long 122°46'25", in NW¼SE¼ sec.2, T.19 S., R.1 W., Lake County, on left bank 10 ft (3 m) upstream from highway bridge, 1.1 mi (1.8 km) downstream from Fall Creek Dam, 2.3 mi (3.7 km) southeast of town of Fall Creek, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--186 mi² (482 km²).

PERIOD OF RECORD.--October to December 1911 (published as Big Fall Creek near Fall Creek; gage heights and discharge measurements only), September 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 637.81 ft (194.404 m) above mean sea level (Corps of Engineers bench mark). Oct. 1 to Dec. 31, 1911, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum. Sept. 9, 1935, to Aug. 3, 1950, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 582 ft³/s (16.5 m³/s), 42.49 in/yr (1,079 mm/yr), 421,700 acre-ft/yr (520 hm³/yr), adjusted for storage since January 1965.

EXTREMES.--Current year: Maximum discharge, 2,040 ft³/s (57.8 m³/s) Dec. 19, gage height, 5.45 ft (1.661 m); minimum, 17 ft³/s (0.48 m³/s) Feb. 8.

Period of record: Maximum discharge, 24,700 ft³/s (700 m³/s) Dec. 11, 1956, gage height, 18.80 ft (5.370 m), from rating curve extended above 9,700 ft³/s (275 m³/s); minimum, 1.5 ft³/s (0.042 m³/s) Oct. 7, 8, 1965.

REMARKS.--Records good. Flow regulated since 1966 by Fall Creek Lake (see station 14150900). No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1094: 1946(M). WSP 1248: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	373	750	170	647	35	41	46	45	113	153	106	99
2	138	760	165	666	32	38	44	45	113	153	108	99
3	103	760	163	785	31	38	43	45	114	124	108	99
4	103	824	145	699	32	39	43	45	134	93	108	133
5	103	1.020	147	527	30	39	42	45	152	93	110	148
6	103	842	152	454	33	39	42	45	153	94	110	148
7	108	765	155	313	38	39	41	45	153	94	110	150
8	108	750	155	254	38	39	42	45	153	94	110	150
9	108	765	155	274	38	39	42	45	153	93	110	150
10	110	760	155	283	39	41	42	45	153	93	110	150
11	110	755	155	323	39	41	42	45	153	94	110	150
12	110	765	155	1.170	39	41	42	45	153	94	110	150
13	110	740	155	1.050	39	42	42	45	153	94	108	150
14	110	735	155	758	38	41	42	45	153	95	108	145
15	110	735	142	1.540	38	41	42	76	153	95	108	148
16	110	442	193	1.280	38	42	42	112	153	94	106	148
17	110	91	583	1.270	39	44	45	110	153	95	106	387
18	110	95	1.560	1.260	39	41	47	110	153	95	103	550
19	110	123	1.400	893	39	50	46	110	153	105	103	546
20	482	135	1.090	615	39	47	46	110	153	108	101	546
21	770	120	1.080	615	38	47	45	110	153	100	101	542
22	765	126	1.080	518	37	45	45	110	153	101	101	542
23	755	112	1.090	446	36	44	45	110	153	101	101	542
24	775	107	1.100	471	37	43	45	111	153	101	101	555
25	775	98	1.090	501	38	42	45	110	153	101	101	560
26	765	266	1.090	327	38	41	45	110	153	101	99	555
27	755	386	1.010	196	38	42	45	110	153	103	99	600
28	750	375	1.750	196	38	42	45	110	153	103	99	806
29	770	243	1.730	145	------	40	45	110	153	104	99	705
30	775	162	1.690	60	------	44	45	112	153	106	99	1.050
31	765	------	1.060	48	------	44	------	112	------	106	99	------
TOTAL	11.249	14.607	20.920	18.584	1.033	1.296	1.313	2.473	4.451	3.180	3.252	10.703
MEAN	363	487	675	599	36.9	41.8	43.8	79.8	148	103	105	357
MAX	775	1.020	1.750	1.540	39	50	47	112	153	153	110	1.050
MIN	103	91	142	48	30	38	41	45	113	93	99	99
AC-FT	22.310	28.970	41.490	36.860	2.050	2.570	2.600	4.910	8.830	6.310	6.450	21.230
MEAN†	37.4	172	827	716	330	696	683	197	127	45.7	23.6	78.0
CFSM†	.20	.92	4.45	3.85	1.77	3.74	3.67	1.06	.68	.26	.13	.42
IN.†	.23	1.03	5.13	4.44	1.84	4.31	4.10	1.22	.76	.28	.15	.47
AC-FT†	2,300	10,230	50,830	44,040	18,320	42,790	40,620	12,110	7,530	2,810	1,450	4,640

CAL YR 1972 TOTAL 263,919 MEAN 721 MAX 4,560 MIN 54 AC-FT 523,500 MEAN† 734 CFSM† 3.95 IN.† 53.75 AC-FT† 533,110
WTR YR 1973 TOTAL 93,061 MEAN 255 MAX 1,750 MIN 30 AC-FT 184,600 MEAN† 328 CFSM† 1.76 IN.† 23.96 AC-FT† 237,670

† Adjusted for change in contents in Fall Creek Lake.

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OREG.

LOCATION.--Lat 43°59'55", long 122°54'20", in SW¼SW¼ sec.14, T.18 S., R.2 W., Lane County, on right bank 25 ft (8 m) downstream from highway bridge at Jasper, 0.1 mi (0.2 km) downstream from Hills Creek, and at mile 195.0 (313.8 km).

DRAINAGE AREA.--1,340 mi^2 (3,471 km^2).

PERIOD OF RECORD.--September 1905 to February 1912, July 1913 to March 1917, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 513.45 ft (156.500 m) above mean sea level. September 1905 to February 1912 and July 1913 to March 1917, nonrecording gage at approximately same site at datum about 1.5 ft (0.46 m) higher. Oct. 22, 1952, to Sept. 30, 1953, nonrecording gage at site 25 ft (8 m) upstream at same datum.

AVERAGE DISCHARGE.--30 years (1905-11, 1913-16, 1952-73), 4,082 ft^3/s (116 m^3/s), 2,957,000 acre-ft/yr (3.65 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft^3/s (343 m^3/s) Dec. 27, gage height, 7.22 ft (2.201 m); minimum, 694 ft^3/s (19.7 m^3/s) Apr. 10.

Period of record: Maximum discharge, 94,000 ft^3/s (2,660 m^3/s) Nov. 23, 1909, gage height, 17.4 ft (5.30 m), datum then in use, from graph based on gage readings, from rating curve extended above 42,000 ft^3/s (1,190 m^3/s); minimum, 366 ft^3/s (10.4 m^3/s) Dec. 5, 1954.

REMARKS.--Records excellent. Flow regulated since 1953 by Lookout Point Lake (see station 14149000), since 1961 by Hills Creek Lake (see station 14145100), and since 1966 by Fall Creek Lake (see station 14150900). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1288: 1907-8, 1910-12, 1914-16, drainage area.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.710	4.610	3.940	5.860	1.560	1.800	2.010	853	1.000	1.510	1.810	2.100
2	3.020	4.330	4.020	5.030	1.510	1.760	2.000	835	1.270	1.510	1.770	2.100
3	2.490	3.660	4.160	4.100	1.690	1.690	1.900	799	1.270	1.540	1.760	2.100
4	2.300	4.260	4.590	3.980	1.670	1.690	1.790	808	1.290	1.490	1.830	2.130
5	2.320	4.370	5.030	3.660	1.640	1.660	1.730	787	1.330	1.500	1.900	2.160
6	2.460	4.440	5.240	3.060	1.700	1.650	1.670	772	1.320	1.510	2.040	2.040
7	2.360	4.630	4.990	2.820	1.690	1.610	1.620	773	1.300	1.520	2.050	1.900
8	2.290	4.630	4.700	2.650	1.610	1.620	1.590	777	1.470	1.510	2.060	1.580
9	2.360	4.650	2.820	3.230	1.590	1.630	1.540	774	1.520	1.510	2.050	1.520
10	2.430	4.720	2.700	3.210	1.570	2.090	786	779	1.510	1.520	1.950	1.500
11	2.530	4.700	3.800	3.100	1.550	2.180	891	848	1.520	1.510	2.070	1.320
12	2.270	4.730	4.790	4.260	1.560	2.000	1.060	825	1.470	1.510	2.030	1.410
13	2.250	4.640	4.080	6.220	1.540	1.950	1.010	808	1.330	1.510	2.090	1.520
14	2.370	4.760	1.890	3.570	1.520	1.890	984	790	1.340	1.510	2.080	1.540
15	2.390	4.740	1.490	7.280	1.510	1.840	954	810	1.460	1.500	2.050	1.560
16	2.410	4.520	1.560	7.390	1.490	1.800	985	870	1.580	1.600	2.680	1.550
17	2.300	4.080	3.070	10.300	1.520	1.870	1.230	873	1.640	1.710	2.790	1.740
18	2.340	4.100	4.510	10.100	1.550	1.820	1.350	864	1.560	1.830	2.770	1.950
19	2.300	4.150	8.070	9.610	1.530	2.110	1.360	883	1.390	1.800	2.760	1.960
20	2.900	4.190	7.180	5.450	1.510	2.200	1.210	888	1.360	1.750	2.750	1.970
21	3.430	4.120	7.130	5.050	1.460	2.110	1.240	880	1.350	1.750	2.750	1.970
22	3.290	3.970	7.730	4.900	1.450	2.020	1.180	882	1.350	1.800	2.780	1.970
23	3.270	3.830	7.860	4.760	1.430	1.920	1.120	876	1.550	1.780	2.770	2.000
24	3.490	3.780	8.830	4.140	1.430	1.840	1.050	935	1.560	1.800	2.100	2.140
25	3.800	3.790	7.980	4.120	1.460	1.770	985	968	1.480	1.820	2.020	2.150
26	3.820	4.030	8.560	3.960	1.470	1.720	937	908	1.380	1.810	2.010	2.000
27	4.230	4.160	8.620	2.280	1.580	1.720	911	884	1.370	1.810	1.960	1.950
28	4.130	4.390	11.200	1.950	1.570	1.790	920	872	1.360	1.810	2.040	2.130
29	3.940	4.270	8.830	1.790	------	1.730	898	862	1.520	1.810	2.090	2.020
30	4.000	4.120	7.440	1.750	------	1.770	883	863	1.510	1.810	2.510	2.360
31	4.140	------	6.550	1.670	------	1.970	------	861	------	1.810	2.180	------
TOTAL	91.340	129.370	173.360	141.250	43.360	57.210	37.794	26.167	42.360	51.160	68.500	56.360
MEAN	2.946	4.312	5.592	4.556	1.549	1.845	1.260	844	1.412	1.650	2.210	1.879
MAX	4.230	4.760	11.200	10.300	1.700	2.200	2.010	968	1.640	1.830	2.790	2.360
MIN	2.250	3.660	1.490	1.670	1.430	1.610	786	772	1.000	1.490	1.760	1.320
CFSM	2.20	3.22	4.17	3.40	1.16	1.38	.94	.63	1.05	1.23	1.65	1.40
IN.	2.54	3.59	4.81	3.92	1.20	1.59	1.05	.73	1.18	1.42	1.90	1.56
AC-FT	181.200	256.600	343.900	280.200	86.000	113.500	74.960	51.900	84.020	101.500	135.900	111.800

CAL YR 1972 TOTAL 1.952.990 MEAN 5.336 MAX 18.100 MIN 1.490 CFSM 3.98 IN 54.22 AC-FT 3.874.000
WTR YR 1973 TOTAL 918.211 MEAN 2.516 MAX 11.200 MIN 772 CFSM 1.88 IN 25.49 AC-FT 1.821.000

14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OREG.

LOCATION.--Lat 43°38'30", long 123°05'05", in SW¼ sec.20, T.22 S., R.3 W., Lane County, on left bank 0.6 mi (1.0 km) north of London, 11.0 mi (17.7 km) south of Cottage Grove, and at mile 35.9 (57.8 km).

DRAINAGE AREA.--72.1 mi² (186.7 km²).

PERIOD OF RECORD.--September 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 852.58 ft (259.866 m) above mean sea level (levels by Corps of Engineers). Sept. 18 to Oct. 17, 1935, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 204 ft³/s (5.78 m³/s), 38.42 in/yr (976 mm/yr), 147,800 acre-ft/yr (182 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,080 ft³/s (30.6 m³/s) Dec. 22, gage height, 4.09 ft (1.247 m); minimum, 7.6 ft³/s (0.22 m³/s) Aug. 13.

Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) Dec. 22, 1964, gage height, 13.37 ft (4.075 m), from rating curve extended above 3,200 ft³/s (90.6 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 7.5 ft³/s (0.21 m³/s) Sept. 26, 1965.

REMARKS.--Records good. No regulation. Diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	32	55	205	232	287	345	99	42	24	12	12
2	18	48	55	221	202	241	346	92	40	23	11	11
3	18	110	128	211	178	213	293	89	39	22	11	9.7
4	18	173	114	188	201	205	251	103	37	21	12	9.7
5	17	150	88	171	197	182	226	91	35	20	11	9.4
6	16	98	74	152	190	166	202	82	33	21	11	9.4
7	16	76	63	136	175	146	175	79	32	20	12	19
8	16	92	55	124	159	131	158	77	31	19	12	16
9	17	74	48	117	149	123	145	73	31	19	11	12
10	114	112	40	120	146	273	135	68	31	18	12	12
11	96	94	42	212	134	309	126	65	30	18	12	11
12	48	70	42	586	134	235	120	62	32	18	11	10
13	76	60	38	868	122	220	136	59	35	17	10	10
14	61	51	36	572	118	223	118	56	32	16	9.9	11
15	42	45	36	389	116	201	110	54	36	16	9.6	10
16	34	42	140	723	110	215	134	51	39	15	9.9	10
17	30	39	555	598	115	238	260	49	60	15	11	11
18	27	43	556	437	115	217	282	47	54	15	11	16
19	25	76	481	350	110	358	306	47	41	15	10	21
20	24	67	532	296	104	452	379	46	36	18	10	51
21	24	66	389	285	100	402	313	45	33	19	10	30
22	23	67	801	245	95	375	261	43	31	18	9.9	30
23	22	58	666	215	89	318	223	48	31	16	10	53
24	21	51	852	222	88	275	188	91	30	16	14	140
25	21	47	559	275	107	244	165	101	30	14	21	110
26	26	57	368	255	104	214	149	67	32	14	15	57
27	24	80	439	224	112	207	135	58	28	13	13	41
28	40	72	461	206	120	208	123	53	26	13	13	33
29	54	69	373	197	------	192	114	49	25	12	12	29
30	38	61	292	223	------	218	107	46	25	12	12	27
31	31	------	244	269	------	310	------	44	------	11	13	------
TOTAL	1,055	2,190	8,624	9,290	3,822	7,598	6,025	2,034	1,037	528	362.3	831.2
MEAN	34.0	73.0	278	300	137	245	201	65.6	34.6	17.0	11.7	27.7
MAX	114	173	852	868	232	452	379	103	60	24	21	140
MIN	16	32	36	117	88	123	107	43	25	11	9.6	9.4
CFSM	.47	1.01	3.86	4.16	1.90	3.40	2.79	.91	.48	.24	.16	.38
IN.	.54	1.13	4.45	4.79	1.97	3.92	3.11	1.05	.54	.27	.19	.43
AC-FT	2,090	4,340	17,110	18,430	7,580	15,070	11,950	4,030	2,060	1,050	719	1,650

CAL YR 1972 TOTAL 87,155.0 MEAN 238 MAX 3,680 MIN 11 CFSM 3.30 IN 44.97 AC-FT 172,900
WTR YR 1973 TOTAL 43,396.5 MEAN 119 MAX 868 MIN 9.4 CFSM 1.65 IN 22.39 AC-FT 86,080

PEAK DISCHARGE (BASE, 2,100 CFS).--No peak above base.

14153000 COTTAGE GROVE LAKE NEAR COTTAGE GROVE, OREG.

LOCATION.--Lat 43°43'00", long 123°02'55", in NE¼ sec.28, T.21 S., R.3 W., Lane County, in east abutment of dam on Coast Fork Willamette River 5.8 mi (9.3 km) south of Cottage Grove, and at mile 29.7 (47.8 km).

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--October 1942 to current year. Prior to October 1971, published as Cottage Grove Reservoir near Cottage Grove.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 31,610 acre-ft (39.0 hm³) May 29-31, June 1, elevation, 789.85 ft (240.746 m); minimum observed, 45 acre-ft (55,500 m³) Nov. 16, 17, elevation, 725.0 ft (220.98 m).

Period of record: Maximum contents, 36,750 acre-ft (45.3 hm³) Dec. 24, 1964, elevation, 794.23 ft (242.081 m); minimum since first filling, no contents Sept. 26 to Oct. 19, 1966, and Nov. 14, 15, Nov. 20 to Dec. 8, 1969.

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed by Corps of Engineers in 1942; storage began Oct. 31, 1942. Capacity, 32,930 acre-ft (40.6 hm³) between elevation 719.0 ft (219.15 m), outlet conduit, and 791.0 ft (241.10 m), crest of spillway. Dead storage negligible. Reservoir used for flood control and improvement of navigation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1218: 1950.

Capacity table (elevation, in feet, and total contents, in acre-feet)

710.9	0	755	4,860	780	21,460
730	151	760	7,150	785	26,370
740	926	765	9,970	790	31,780
745	1,840	770	13,260	793	35,270
750	3,140	775	17,070		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,770	3,400	373	2,850	6,310	11,250	24,960	30,320	31,600	30,660	28,110	25,330
2	5,620	3,340	392	2,890	6,450	11,760	25,230	30,400	31,570	30,590	28,020	25,250
3	5,560	3,330	512	2,890	6,570	12,220	25,410	30,480	31,560	30,530	27,910	25,150
4	5,500	3,290	619	2,890	6,790	12,700	25,560	30,600	31,510	30,450	27,810	25,070
5	5,430	3,170	649	2,910	6,980	13,040	25,740	30,670	31,480	30,390	27,720	24,990
6	5,360	3,040	660	2,920	7,150	13,330	25,910	30,740	31,440	30,320	27,620	24,900
7	5,300	2,940	670	2,920	7,290	13,570	26,090	30,790	31,410	30,250	27,540	24,850
8	5,230	2,880	670	2,920	7,450	13,770	26,280	30,860	31,370	30,170	27,430	24,780
9	5,180	2,550	670	2,980	7,670	13,980	26,460	30,900	31,330	30,080	27,340	24,700
10	5,270	2,090	670	3,080	7,880	14,520	26,660	30,970	31,260	30,000	27,240	24,610
11	5,400	1,530	670	3,220	8,070	15,230	26,830	31,020	31,230	29,910	27,160	24,550
12	5,420	1,000	753	3,410	8,240	15,650	26,970	31,080	31,200	29,830	27,070	24,450
13	5,490	596	556	4,400	8,410	16,110	27,210	31,130	31,180	29,740	26,980	24,360
14	5,530	165	445	4,790	8,600	16,540	27,370	31,160	31,140	29,670	26,890	24,270
15	5,540	57	461	4,180	8,770	16,910	27,510	31,190	31,110	29,590	26,780	24,190
16	5,520	45	649	4,670	8,940	17,370	27,760	31,200	31,110	29,490	26,680	24,100
17	5,480	45	1,280	4,780	9,120	17,880	28,160	31,210	31,150	29,400	26,600	23,920
18	5,440	73	1,820	4,560	9,270	8,350	28,400	31,220	31,180	29,330	26,510	23,630
19	5,400	130	2,130	4,360	9,430	9,330	28,640	31,220	31,180	29,240	26,400	23,380
20	5,230	203	2,300	4,210	9,560	20,420	28,760	31,220	31,160	29,160	26,300	23,200
21	4,980	248	2,460	4,010	9,700	21,250	28,630	31,220	31,120	29,090	26,210	22,980
22	4,740	277	3,210	4,050	9,800	21,660	28,960	31,220	31,070	29,010	26,120	22,750
23	4,500	277	3,840	4,260	9,910	22,030	29,030	31,260	31,040	28,920	26,010	22,580
24	4,260	277	4,430	4,460	10,020	22,360	29,210	31,350	31,000	28,840	25,960	22,590
25	4,060	277	4,380	4,790	10,160	22,650	29,430	31,480	30,970	28,750	25,900	22,540
26	3,930	277	3,910	5,110	10,300	22,900	29,660	31,540	30,940	28,670	25,820	22,340
27	3,800	367	3,500	5,320	10,470	23,250	29,840	31,560	30,900	28,580	25,750	22,110
28	3,700	392	3,510	5,460	10,670	23,550	29,970	31,580	30,840	28,470	25,650	21,840
29	3,640	399	3,180	5,670	------	23,810	30,100	31,610	30,770	28,390	25,570	21,610
30	3,550	386	2,870	5,980	------	24,180	30,230	31,610	30,720	28,290	25,500	21,300
31	3,480	------	2,870	6,190	------	24,570	------	31,610	------	28,210	25,420	------
MAX	5,770	3,400	4,430	6,190	10,670	24,570	30,230	31,610	31,600	30,660	28,110	25,330
MIN	3,480	45	373	2,850	6,310	11,250	24,960	30,320	30,720	28,210	25,420	21,300
(†)	731.10	734.8	749.08	758.06	766.13	783.22	788.61	789.85	789.05	786.75	784.07	779.82
(‡)	-2,710	-3,090	+2,480	+3,320	+4,480	+13,900	+5,660	+1,380	-890	-2,510	-2.790	-4,120

CAL YR 1972 MAX 34,360 MIN 45 AC-FT ‡ -30
WTR YR 1973 MAX 31,610 MIN 45 AC-FT ‡ +15,110

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14153500 COAST FORK WILLAMETTE RIVER BELOW COTTAGE GROVE DAM, OREG.

LOCATION.--Lat 43°43'15", long 123°02'55", in NE¼ sec.28, T.21 S., R.3 W., Lane County, on right bank at bridge 0.3 mi (0.5 km) downstream from Cottage Grove Dam, 5.5 mi (8.8 km) south of Cottage Grove, and at mile 29.4 (47.3 km).

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1944, published as "near Cottage Grove."

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft (216.713 m) above mean sea level (Corps of Engineers bench mark). Jan. 1 to Oct. 12 1939, nonrecording gage and Oct. 13, 1939, to Sept. 30, 1944, water-stage recorder at several sites and datums 0.8 mi (1.3 km) downstream.

AVERAGE DISCHARGE.--34 years, 280 ft³/s (7.93 m³/s), 36.56 in/yr (929 mm/yr), 202,900 acre-ft/yr (250 hm³/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 1,120 ft³/s (31.7 m³/s) Jan. 13, gage height, 5.88 ft (1.792 m); minimum, 39 ft³/s (1.10 m³/s) Dec. 21.

Period of record: Maximum discharge, 5,910 ft³/s (167 m³/s) Dec. 24, 1964, gage height, 11.83 ft (3.606 m); practically no flow July 5-7, 1945, Aug. 24, 1947.

REMARKS.--Records excellent. Flow regulated since 1942 by Cottage Grove Lake (see station 14153000). Small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1448: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	75	69	286	235	69	250	69	51	52	50	50
2	100	75	67	272	198	69	300	69	51	51	50	50
3	52	122	70	272	173	70	283	69	51	51	50	50
4	51	203	74	247	168	70	247	69	51	51	50	50
5	51	223	75	210	168	70	203	69	51	51	51	50
6	51	165	75	195	168	70	160	69	51	51	50	50
7	51	134	70	178	170	70	136	70	51	51	50	51
8	51	126	67	158	138	70	108	70	51	51	50	51
9	51	235	66	130	98	70	80	58	51	51	50	51
10	51	332	66	116	89	72	80	51	51	51	50	51
11	51	328	64	183	89	72	80	51	51	51	50	51
12	51	332	64	609	91	72	70	51	51	51	50	51
13	51	325	64	609	75	74	64	51	51	51	50	51
14	51	311	64	496	66	74	64	51	51	50	50	51
15	51	128	63	850	66	74	64	51	51	50	50	51
16	51	51	63	713	66	75	64	51	51	50	51	51
17	51	49	250	722	66	75	120	51	51	50	52	110
18	51	50	416	717	66	75	235	51	51	50	50	158
19	51	61	440	588	66	77	256	51	51	50	50	160
20	112	63	564	492	67	78	388	51	51	50	50	160
21	147	60	448	488	67	151	353	51	51	50	50	160
22	145	63	419	328	67	311	262	51	51	50	51	160
23	145	64	722	208	69	259	225	51	51	50	50	160
24	142	64	735	210	69	198	147	51	51	50	49	160
25	124	64	740	210	69	180	84	51	51	51	49	160
26	96	64	731	213	69	156	74	51	51	50	49	160
27	96	66	717	215	69	120	70	52	51	50	49	160
28	94	67	713	215	69	132	69	52	51	50	49	160
29	94	67	699	180	------	126	69	51	51	50	49	160
30	87	69	504	156	------	116	69	51	52	50	49	160
31	75	------	335	235	------	195	------	51	------	51	50	------
TOTAL	2,548	4,036	9,514	10,701	2,871	3,390	4,674	1,736	1,531	1,566	1,548	2,998
MEAN	82.2	135	307	345	103	109	156	56.0	51.0	50.5	49.9	99.9
MAX	223	332	740	850	235	311	388	70	52	52	52	160
MIN	51	49	63	116	66	69	64	51	51	50	49	50
AC-FT	5,050	8,010	18,870	21,230	5,690	6,720	9,270	3,440	3,040	3,110	3,070	5,950
MEAN†	38.1	82.7	347	399	183	335	251	78.4	36.1	9.76	4.55	30.8
CFSM†	.366	.795	3.34	3.84	1.76	3.22	2.41	.754	.347	.094	.044	.296
IN.†	.42	.89	3.85	4.43	1.83	3.72	2.69	.87	.39	.11	.05	.33
AC-FT†	2,340	4,920	21,350	24,550	10,170	20,620	14,930	4,820	2,150	600	280	1,830

CAL YR 1972 TOTAL 116,312 MEAN 318 MAX 3,090 MIN 49 AC-FT 230,700 MEAN† 318 CFSM† 3.06 IN.† 41.60 AC-FT† 230,670
WTR YR 1973 TOTAL 47,113 MEAN 129 MAX 850 MIN 49 AC-FT 93,450 MEAN† 150 CFSM† 1.44 IN.† 19.58 AC-FT† 108,560

† Adjusted for change in contents in Cottage Grove Lake.

14154500 ROW RIVER ABOVE PITCHER CREEK, NEAR DORENA, OREG.

LOCATION.--Lat 43°44'10", long 122°52'20", in NE¼ sec.24, T.21 S., R.2 W., Lane County, on right bank 0.5 mi (0.8 km) upstream from Pitcher Creek, 1.2 mi (1.9 km) northwest of Dorena, and at mile 13.2 (21.2 km).

DRAINAGE AREA.--211 mi^2 (546 km^2).

PERIOD OF RECORD.--September 1935 to current year. Prior to October 1949, published as "at Star."

GAGE.--Water-stage recorder. Datum of gage is 856.16 ft (260.958 m) above mean sea level. Sept. 16, 1935, to Oct. 17, 1938, nonrecording gage at site 450 ft (137 m) upstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--38 years, 598 ft^3/s (16.9 m^3/s), 38.49 in/yr (978 mm/yr), 433,300 acre-ft/yr (534 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,940 ft^3/s (112 m^3/s) Dec. 17, gage height, 7.51 ft (2.289 m); minimum, 12 ft^3/s (0.34 m^3/s) Aug. 16, 17.

Period of record: Maximum discharge, 33,100 ft^3/s (937 m^3/s) Dec. 22, 1964, gage height, 18.19 ft (5.544 m), from rating curve extended above 12,000 ft^3/s (340 m^3/s), on basis of slope-area measurement of peak flow; minimum, 10 ft^3/s (0.28 m^3/s) Sept. 24, 25, 1951, Oct. 7, 8, 1958.

REMARKS.--Records good. Slight regulation caused by upstream logponds. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	74	180	545	466	633	952	327	98	47	24	17
2	28	178	156	664	429	631	901	300	90	45	22	16
3	27	225	255	658	401	530	798	298	85	43	20	15
4	26	790	230	515	436	473	782	328	80	42	20	14
5	25	760	180	436	486	455	840	294	74	42	20	14
6	24	359	162	370	490	439	770	274	69	42	20	13
7	24	250	128	314	443	403	600	265	66	40	20	26
8	23	245	110	275	391	377	494	255	63	39	20	36
9	23	218	110	260	366	351	467	241	61	39	19	24
10	142	370	110	250	363	852	453	224	60	38	20	19
11	289	310	100	525	342	1.080	428	209	58	36	22	17
12	156	210	100	2.400	335	771	416	208	58	36	20	16
13	200	162	95	3.120	307	669	605	227	67	35	19	15
14	210	130	90	1.910	283	649	474	240	61	32	17	15
15	114	108	90	1.190	283	628	398	220	76	34	15	15
16	83	93	220	1.590	265	695	414	198	77	33	13	15
17	78	80	2.300	1.500	301	803	1.080	179	169	32	15	14
18	65	78	2.340	1.070	355	705	1.100	160	210	31	15	17
19	53	98	2.060	856	338	878	1.250	143	138	31	15	30
20	47	124	1.880	676	301	1.040	1.400	129	104	34	14	101
21	43	111	1.210	652	275	948	1.220	115	86	35	14	84
22	41	128	2.250	580	258	927	1.270	107	76	34	14	62
23	39	114	1.930	505	238	792	1.160	106	74	31	14	99
24	36	104	2.540	486	228	756	899	194	69	31	18	345
25	35	93	1.690	646	265	782	760	323	66	30	34	359
26	40	345	1.050	555	265	671	690	210	69	28	27	164
27	41	470	934	474	307	574	617	165	60	28	21	102
28	52	298	1.020	436	310	553	506	142	54	27	19	75
29	95	265	850	426	------	538	424	126	51	25	17	59
30	69	223	664	450	------	598	369	114	49	26	17	49
31	59	------	640	560	------	1.090	------	107	------	24	17	------
TOTAL	2.217	7.013	25.674	24.894	9.527	21.291	22.537	6.428	2.418	1.070	582	1.847
MEAN	71.5	234	828	803	340	687	751	207	80.6	34.5	18.8	61.6
MAX	289	790	2.540	3.120	490	1.090	1.400	328	210	47	34	359
MIN	23	74	90	250	228	351	369	106	49	24	13	13
CFSM	.34	1.11	3.92	3.81	1.61	3.26	3.56	.98	.38	.16	.09	.29
IN.	.39	1.24	4.53	4.39	1.68	3.75	3.97	1.13	.43	.19	.10	.33
AC-FT	4.400	13.910	50.920	49.380	18.900	42.230	44.700	12.750	4.800	2.120	1.150	3.660

CAL YR 1972 TOTAL 281.339 MEAN 769 MAX 12.900 MIN 17 CFSM 3.64 IN 49.60 AC-FT 558.000
WTR YR 1973 TOTAL 125.498 MEAN 344 MAX 3.120 MIN 13 CFSM 1.63 IN 22.13 AC-FT 248.900

PEAK DISCHARGE (BASE, 7,000 CFS).--No peak above base.

14155000 DORENA LAKE NEAR COTTAGE GROVE, OREG.

LOCATION.--Lat 43°47'10", long 122°57'15", in SE¼ sec.32, T.20 S., R.2 W., Lane County, on left end of Dorena Dam on Row River, 5.0 mi (8.0 km) east of Cottage Grove, and at mile 7.61 (12.24 km).

DRAINAGE AREA.--265 mi² (686 km²).

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1971, published as Dorena Reservoir near Cottage Grove.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 72,980 acre-ft (90.0 hm³) May 29, elevation, 832.51 ft (253.749 m); minimum, 6,320 acre-ft (7.79 hm³) Dec. 31, elevation, 768.97 ft (234.382 m).

Period of record: Maximum contents, 95,550 acre-ft (118 hm³) Dec. 23, 1964, elevation, 844.03 ft (257.260 m); minimum observed since first filling, 159 acre-ft (0.196 hm³) Dec. 14, 1970, elevation, 743.60 ft (226.649 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete outlet and spillway, completed in 1949 by Corps of Engineers; controlled storage began Oct. 11, 1949. Capacity, 77,580 acre-ft (95.7 hm³) between elevations 739.0 ft (225.25 m), sill of outlet gates, and 835.0 ft (254.51 m), crest of spillway. Dead storage, 18 acre-ft (22,200 m³) below elevation 739.0 ft (225.25 m). Reservoir used for flood control and improvement of navigation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

765	4,560	795	23,780	825	60,060
770	6,840	800	28,490	830	68,470
775	9,540	805	33,700	835	77,600
780	12,530	810	39,380	840	87,320
785	15,850	815	45,620	845	97,580
790	19,580	820	52,480		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37,460	7,760	6,840	6,640	14,100	24,400	58,780	72,580	72,860	70,070	59,840	48,530
2	36,820	7,510	6,840	6,740	14,340	25,480	59,570	72,360	72,780	69,880	59,460	48,160
3	36,170	7,400	6,990	6,740	14,700	26,380	59,980	72,180	72,710	69,660	59,040	47,820
4	35,540	8,140	6,940	7,670	15,220	27,140	60,690	72,130	72,620	69,450	58,670	47,460
5	34,910	8,600	6,960	7,200	15,670	27,870	61,280	72,070	72,510	69,150	58,280	47,120
6	34,240	7,850	7,000	7,000	16,050	28,530	61,640	72,050	72,380	68,930	57,900	46,790
7	33,600	6,900	6,940	6,980	16,400	29,100	62,040	72,050	72,240	68,670	57,520	46,510
8	32,950	6,690	6,770	6,950	16,780	29,600	64,450	72,050	72,070	68,420	57,140	46,210
9	32,330	6,680	6,740	6,950	17,200	30,110	62,890	72,050	71,910	68,190	56,760	45,900
10	31,990	6,810	6,760	7,090	17,650	31,800	63,310	72,070	71,760	67,940	56,410	45,560
11	31,500	6,760	6,760	7,520	18,040	33,860	63,660	72,070	71,620	67,630	56,020	45,240
12	30,520	6,840	6,840	10,080	18,460	35,240	64,030	72,090	71,510	67,300	55,670	44,890
13	29,670	6,860	6,880	14,470	18,910	36,490	64,480	72,180	71,370	66,880	55,260	44,550
14	28,790	6,900	6,870	16,750	19,220	37,640	64,680	72,240	71,260	66,510	54,940	44,190
15	27,770	6,930	6,850	15,430	19,490	38,760	65,010	72,240	71,150	66,140	54,520	43,860
16	26,600	6,920	7,220	15,220	19,740	40,060	65,640	72,270	71,130	65,770	54,160	43,520
17	25,430	6,910	11,560	14,750	20,100	41,570	67,240	72,290	71,330	65,420	53,770	43,040
18	24,320	6,930	11,770	13,360	20,560	42,940	68,030	72,240	71,510	65,020	53,400	42,470
19	23,180	7,020	8,320	12,070	20,960	44,840	68,670	72,140	71,550	64,670	53,010	41,950
20	21,720	7,070	6,650	11,310	21,300	47,200	69,130	72,040	71,510	64,300	52,690	41,540
21	20,040	7,030	7,240	10,940	21,550	48,900	69,270	71,930	71,440	63,920	52,320	41,050
22	18,390	7,030	10,710	10,730	21,770	49,810	69,730	71,910	71,330	63,590	51,980	40,620
23	16,830	6,990	12,040	10,770	21,940	50,550	69,880	71,950	71,240	63,210	51,620	40,240
24	15,270	6,980	14,480	10,970	22,110	51,340	70,000	72,240	71,120	62,860	51,360	40,410
25	14,060	6,990	15,040	11,500	22,340	52,150	70,310	72,640	71,020	62,480	51,020	40,530
26	12,960	7,580	14,260	11,910	22,590	52,780	70,770	72,820	70,920	62,120	50,640	40,240
27	11,900	8,100	12,210	12,280	22,900	53,480	71,350	72,910	70,790	61,740	50,300	39,830
28	10,870	7,860	9,040	12,530	23,160	54,210	71,960	72,960	70,650	61,370	49,960	39,370
29	9,930	7,510	6,830	12,860	------	54,900	72,540	72,980	70,430	60,990	49,580	39,070
30	8,920	7,030	6,340	13,360	------	55,900	72,710	72,960	70,250	60,620	49,250	38,760
31	8,230	------	6,440	13,850	------	57,580	------	72,930	------	60,220	48,880	------
MAX	37,460	8,600	15,040	16,750	23,160	57,580	72,710	72,980	72,860	70,070	59,840	48,530
MIN	8,230	6,680	6,340	6,640	14,100	24,400	58,780	71,910	70,250	60,220	48,880	38,760
(†)	772.64	770.38	769.2	782.06	794.3	823.42	832.36	832.48	831.00	825.10	817.44	809.47
(‡)	-29,860	-1,200	-590	+7,410	+9,310	+34,420	+15,130	+220	-2,680	-10,030	-11,340	-10,120

CAL YR 1972 MAX 87,460 MIN 6,340 AC-FT‡ -610
WTR YR 1973 MAX 72,980 MIN 6,340 AC-FT‡ +670

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14155500 ROW RIVER NEAR COTTAGE GROVE, OREG.

LOCATION.--Lat 43°47'35", long 122°59'25", in NE¼ sec.36, T.20 S., R.3 W., Lane County, on right bank 1.7 mi (2.7 km) upstream from Mosby Creek, 2.1 mi (3.4 km) downsteam from Dorena Dam, 3.5 mi (5.6 km) east of Cottage Grove, and at mile 5.5 (8.8 km).

DRAINAGE AREA.--270 mi² (699 km²).

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1947, published as "near Dorena."

GAGE.--Water-stage recorder. Datum of gage is 685.24 ft (208.861 m) above mean sea level (levels by Corps of Engineers). Jan. 5 to Oct. 12, 1939, nonrecording gage at site 180 ft (55 m) upstream at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--34 years, 754 ft³/s (21.4 m³/s), 37.92 in/yr (963 mm/yr), 546,300 acre-ft/yr (674 hm³/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,600 ft³/s (130 m³/s) Dec. 18, gage height, 7.68 ft (2.341 m); minimum, 97 ft³/s (2.75 m³/s) July 3.
Period of record: Maximum discharge, 21,400 ft³/s (606 m³/s) Dec. 28, 1945, gage height, 18.20 ft (5.547 m); minimum, 0.20 ft³/s (0.006 m³/s) Sept. 25 to Oct. 7, 1958.

REMARKS.--Records excellent. Flow regulation since October 1949 by Dorena Lake (see station 14155000). No diversion above station.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	299	322	633	455	206	616	434	128	131	193	181
2	363	295	218	616	407	206	725	455	128	131	193	181
3	363	295	281	622	304	210	759	429	128	134	193	181
4	358	497	335	616	295	210	576	418	128	144	193	181
5	358	639	238	765	382	210	651	353	131	144	193	177
6	358	736	193	571	413	214	679	326	134	144	193	177
7	353	708	193	413	378	214	492	304	134	144	189	177
8	353	382	166	373	295	206	368	295	134	144	189	177
9	353	263	121	342	234	189	335	272	134	144	189	177
10	353	335	99	280	222	193	335	234	134	144	189	177
11	565	397	99	425	222	197	308	218	134	170	189	177
12	685	214	97	1.290	185	197	290	218	134	197	189	177
13	679	174	97	1.380	181	202	429	218	134	197	189	177
14	673	137	97	872	193	202	418	222	134	197	189	177
15	668	114	97	2.100	193	206	299	222	134	197	189	177
16	662	114	141	2.080	193	206	206	206	134	197	189	174
17	656	102	559	2.080	193	193	439	189	134	197	189	259
18	651	99	2.530	2.020	193	185	874	189	134	197	185	313
19	639	99	4.130	1.700	197	202	1.180	189	134	197	185	313
20	804	144	2.950	1.190	197	202	1.420	193	134	197	185	313
21	928	170	1.270	994	197	349	1.340	159	134	197	185	313
22	910	170	874	844	197	708	1.190	128	134	197	185	313
23	886	170	1.580	616	197	616	1.200	131	131	197	185	308
24	868	141	1.640	519	197	519	916	131	131	197	185	308
25	713	121	1.680	525	197	497	679	131	131	193	185	308
26	628	121	1.680	476	202	476	537	128	131	193	185	308
27	616	349	2.250	418	197	363	397	128	131	193	181	308
28	605	487	2.900	423	202	322	251	128	131	193	181	304
29	588	482	2.080	358	------	322	197	128	131	193	185	206
30	576	476	1.100	304	------	295	313	128	131	193	181	206
31	397	------	719	418	------	487	------	128	------	193	181	------
TOTAL	17.944	8.730	30.736	26.263	6.918	9.004	18.419	7.032	3.969	5.486	5.811	6.925
MEAN	579	291	991	847	247	290	614	227	132	177	187	231
MAX	928	736	4.130	2.100	455	708	1.420	455	134	197	193	313
MIN	335	99	97	280	181	185	197	128	128	131	181	174
AC-FT	35.590	17.320	60.960	52.090	13.720	17.860	36.530	13.950	7.870	10.880	11.530	13.740
MEAN†	93.2	271	982	968	415	850	868	230	87.2	13.8	3.09	60.8
CFSM†	.35	1.00	3.64	3.59	1.54	3.15	3.21	.85	.32	.05	.01	.23
IN.†	.40	1.12	4.19	4.13	1.60	3.63	3.59	.98	.36	.06	.01	.25
AC-FT†	5,730	16,120	60,370	59,500	23,030	52,280	51,660	14,170	5,190	850	190	3,620

CAL YR 1972 TOTAL 336,037 MEAN 918 MAX 7,770 MIN 85 AC-FT 666,500 MEAN† 917 CFSM† 3.40 IN.† 46.25 AC-FT† 665,890
WTR YR 1973 TOTAL 147,237 MEAN 403 MAX 4,130 MIN 97 AC-FT 292,000 MEAN† 404 CFSM† 1.50 IN.† 20.33 AC-FT† 292,670

† Adjusted for change in contents in Dorena Lake.

14156500 MOSBY CREEK AT MOUTH, NEAR COTTAGE GROVE, OREG.

LOCATION.--Lat 43°46'35", long 122°59'55", in SE¼NW¼ sec.1, T.21 S., R.3 W., Lane County, on left bank 3.5 mi (5.6 km) southeast of Cottage Grove and at mile 1.0 (1.6 km).

DRAINAGE AREA.--95.3 mi^2 (246.8 km^2).

PERIOD OF RECORD.--September 1946 to current year. Monthly discharge only September 1946, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 676.62 ft (206.234 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--27 years, 245 ft^3/s (6.94 m^3/s), 34.91 in/yr (887 mm/yr), 177,500 acre-ft/yr (219 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,490 ft^3/s (42.2 m^3/s) Dec. 22, gage height, 4.19 ft (1.277 m); minimum, 2.8 ft^3/s (0.079 m^3/s) Aug. 15.
Period of record: Maximum discharge, 14,100 ft^3/s (399 m^3/s) Dec. 22, 1964, gage height, 13.37 ft (4.075 m), from rating curve extended above 4,600 ft^3/s (130 m^3/s) on basis of slope-area measurement of peak flow; minimum, 2.8 ft^3/s (0.079 m^3/s) Aug. 15, 1973.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	32	57	236	247	333	406	96	31	14	4.5	6.0
2	12	53	54	254	215	334	434	88	29	14	4.4	5.5
3	12	98	119	259	187	277	355	83	28	13	4.8	4.8
4	11	290	126	223	202	244	297	93	26	12	4.7	4.2
5	11	273	93	193	214	212	265	85	24	12	4.6	4.7
6	10	139	78	165	212	191	225	76	23	12	4.7	4.8
7	10	93	62	139	194	161	177	71	21	11	5.0	7.3
8	10	93	55	124	168	142	145	69	20	11	4.5	9.2
9	10	85	46	113	151	129	129	64	20	9.7	4.3	7.9
10	63	142	38	107	146	289	116	60	20	9.1	4.5	6.5
11	136	139	40	208	135	401	107	55	18	8.9	4.9	5.4
12	62	88	40	696	132	297	99	54	18	8.8	4.4	4.8
13	76	67	38	1.150	123	265	126	50	21	8.4	4.2	4.3
14	93	54	36	768	113	289	107	48	21	7.6	3.5	4.3
15	53	42	36	471	112	269	93	45	22	7.7	3.2	4.3
16	37	36	130	764	103	273	96	42	24	7.7	3.5	4.5
17	30	32	1.000	740	108	341	301	39	44	6.9	4.2	4.6
18	25	34	903	509	122	310	417	36	45	6.7	4.8	5.9
19	22	50	720	393	118	480	468	35	32	6.9	4.8	8.6
20	19	64	732	322	108	696	588	35	25	7.9	5.0	27
21	18	57	503	310	100	552	474	34	22	9.6	4.8	26
22	17	55	1.050	273	93	474	373	32	20	9.8	4.5	20
23	16	48	917	234	84	373	305	33	21	8.7	3.8	31
24	16	42	1.160	220	81	310	245	57	20	7.8	5.1	119
25	15	38	743	292	98	277	201	112	19	7.0	9.2	149
26	20	45	448	295	93	233	177	71	21	6.4	10	68
27	20	85	476	261	114	205	149	54	19	5.6	7.8	43
28	23	74	579	230	119	205	135	46	16	5.4	6.9	31
29	54	74	458	210	------	205	119	41	16	5.4	6.9	25
30	43	64	339	217	------	221	107	36	15	4.9	6.1	21
31	34	------	282	282	------	368	------	34	------	4.3	5.9	------
TOTAL	990	2.486	11.358	10.658	3.892	9.356	7.236	1.774	701	270.2	159.5	667.6
MEAN	31.9	82.9	366	344	139	302	241	57.2	23.4	8.72	5.15	22.3
MAX	136	290	1.160	1.150	247	696	588	112	45	14	10	149
MIN	10	32	36	107	81	129	93	32	15	4.3	3.2	4.2
CFSM	.33	.87	3.84	3.61	1.46	3.17	2.53	.60	.25	.09	.05	.23
IN.	.39	.97	4.43	4.16	1.52	3.65	2.82	.69	.27	.11	.06	.26
AC-FT	1.960	4.930	22.530	21.140	7.720	18.560	14.350	3.520	1.390	536	316	1.320

CAL YR 1972 TOTAL 103.046.4 MEAN 282 MAX 5.070 MIN 5.7 CFSM 2.96 IN 40.22 AC-FT 204.400
WTR YR 1973 TOTAL 49.548.3 MEAN 136 MAX 1.160 MIN 3.2 CFSM 1.43 IN 19.34 AC-FT 98.280

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OREG.

LOCATION.--Lat 43°58'50", long 122°57'55", in NW¼ sec.29, T.18 S., R.2 W., Lane County, on right bank at downstream side of bridge on State Highway 58, 2.5 mi (4.0 km) southeast of Goshen, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--642 mi² (1,663 km²).

PERIOD OF RECORD.--August 1905 to February 1912, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 473.80 ft (144.414 m) above mean sea level. Aug. 23, 1905, to Feb. 7, 1912, nonrecording gage at site 600 ft (183 m) upstream at different datum.

AVERAGE DISCHARGE.--29 years (1905-11, 1950-73), 1,683 ft³/s (47.7 m³/s), 1,219,000 acre-ft/yr (1.50 km³/yr).

EXTREMES.--Current year: Maximum discharge, 6,510 ft³/s (184 m³/s) Dec. 19, gage height, 8.57 ft (2.612 m); minimum, 164 ft³/s (4.64 m³/s) July 3,4.

Period of record: Maximum discharge, 58,500 ft³/s (1,660 m³/s) Nov. 22, 1909, gage height, 19.5 ft (5.94 m), site and datum then in use, from rating curve extended above 15,000 ft³/s (425 m³/s); minimum, 36 ft³/s (1.02 m³/s) Sept. 29, 30, Oct. 11, 12, 1908.

REMARKS.--Records good. Flow regulated since 1942 by Cottage Grove Lake (see station 14153000) and since 1949 by Dorena Lake (see station 14155000). Several small diversions for logponds and irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1218: Drainage area. WSP 1248: 1905-12. WSP 1935: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBFR 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	584	441	597	1,450	1,270	864	1,760	675	242	188	242	247
2	538	441	447	1,410	1,060	906	1,750	681	230	184	230	242
3	441	477	538	1,410	950	824	1,720	675	230	180	234	242
4	435	792	655	1,300	935	844	1,450	675	226	180	234	238
5	429	1,090	558	1,360	995	766	1,280	636	217	176	238	238
6	429	980	465	1,180	1,020	746	1,290	571	217	180	242	234
7	423	958	435	950	965	694	1,040	551	213	188	238	247
8	417	694	429	831	850	642	850	532	209	184	238	247
9	423	584	429	785	720	590	733	519	205	184	242	242
10	447	733	429	701	681	778	707	465	201	180	242	242
11	636	943	429	899	694	995	675	423	201	168	238	234
12	759	681	429	2,520	681	837	629	411	201	217	242	234
13	759	610	429	5,670	616	798	688	411	205	221	242	234
14	792	564	367	2,480	584	831	759	400	209	226	242	234
15	793	441	278	4,150	571	785	642	394	213	234	234	234
16	727	264	278	5,230	551	772	545	394	217	234	238	238
17	787	242	1,720	4,790	571	980	811	361	255	238	238	269
18	694	226	3,860	4,060	597	864	1,520	356	282	251	242	489
19	688	278	6,280	3,710	571	1,410	2,050	356	247	251	238	513
20	759	320	5,610	2,700	551	1,890	2,480	350	230	255	247	538
21	1,000	356	3,710	2,310	538	1,500	2,450	345	217	260	238	545
22	988	356	3,010	1,960	519	1,900	1,970	287	209	264	234	545
23	973	356	4,310	1,430	507	1,700	1,870	291	213	269	234	551
24	950	330	5,180	1,330	495	1,370	1,530	320	217	269	251	597
25	864	278	4,100	1,410	649	1,240	1,100	372	209	260	264	688
26	727	278	3,410	1,330	603	1,130	920	335	213	255	260	597
27	707	400	3,970	1,170	655	988	785	296	213	251	255	564
28	707	668	5,280	1,090	610	920	629	278	201	247	251	571
29	714	675	4,210	1,020	------	878	525	264	197	247	247	459
30	701	662	2,640	935	------	878	538	255	197	247	247	435
31	610	------	1,730	1,240	------	1,210	------	255	------	242	247	------
TOTAL	20,781	16,118	66,212	62,811	20,009	31,530	35,696	13,134	6,536	6,930	7,509	11,188
MEAN	670	537	2,136	2,026	715	1,017	1,190	424	218	224	242	373
MAX	1,000	1,090	6,280	5,670	1,270	1,900	2,480	681	282	269	264	688
MIN	417	226	278	701	495	590	525	255	197	168	230	234
AC-FT	41,220	31,970	131,300	124,600	39,690	62,540	70,800	26,050	12,960	13,750	14,890	22,190

CAL YR 1972 TOTAL 685,576 MEAN 1,873 MAX 13,000 MIN 160 AC-FT 1,360,000
WTR YR 1973 TOTAL 290,454 MEAN 318 MAX 6,280 MIN 168 AC-FT 592,000

14158500 MCKENZIE RIVER AT OUTLET OF CLEAR LAKE, OREG.

LOCATION.--Lat 44°21'40", long 121°59'40", in SE¼ sec.8, T.14 S., R.7 E., Linn County, Willamette National Forest, on west bank of Clear Lake in narrow channel, 150 ft (46 m) upstream from outlet and at mile 89.6 (144.2 km).

DRAINAGE AREA.--92.4 mi^2 (239.3 km^2), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--June 1912 to September 1915, October 1947 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 3,015.32 ft (919.070 m) above mean sea level (levels by Eugene Water and Electric Board). June 20, 1912, to July 31, 1915, nonrecording gage at site 1.0 mi (1.6 km) north at different datum.

AVERAGE DISCHARGE.--29 years, 476 ft^3/s (13.5 m^3/s), 69.96 in/yr (1,777 mm/yr), 344,900 acre-ft/yr (425 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 969 ft^3/s (27.4 m^3/s) Dec. 24, gage height, 3.98 ft (1.213 m); minimum, 162 ft^3/s (4.59 m^3/s) Sept. 15, 19.

Period of record: Maximum discharge, 3,300 ft^3/s (93.5 m^3/s) Dec. 23, 1964, gage height, 8.15 ft (2.484 m); minimum daily, 160 ft^3/s (4.53 m^3/s) Sept. 29, 30, 1915.

REMARKS.--Records good. Flow regulated by natural storage in lake. At high stages an undetermined flow enters numerous sinkholes in lave rock along south edge of lake above station.

REVISIONS (WATER YEARS).--WSP 1288: 1949. WSP 1318: 1915(M). WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	289	329	720	446	365	391	489	365	285	214	175
2	350	292	331	696	439	370	389	480	360	282	212	175
3	347	297	328	657	433	379	387	474	354	277	210	174
4	345	306	323	614	429	387	383	473	349	275	208	173
5	342	314	319	579	424	394	381	465	342	273	208	172
6	340	321	315	544	418	399	379	455	336	268	204	172
7	337	327	308	517	411	403	376	448	328	263	202	176
8	332	329	303	499	406	405	377	449	319	261	200	171
9	332	332	299	480	401	409	377	445	310	263	199	170
10	332	334	295	460	399	430	378	441	303	265	198	170
11	329	334	292	452	392	427	380	434	295	261	197	169
12	324	334	291	468	387	425	386	428	289	259	195	168
13	324	340	285	509	379	429	394	424	283	256	194	167
14	321	337	280	628	373	426	395	424	277	254	193	166
15	319	337	276	644	367	426	398	431	274	250	192	165
16	316	334	278	681	361	429	412	441	276	248	192	165
17	314	329	292	689	360	432	423	446	281	245	191	164
18	311	329	301	678	354	430	428	442	277	243	189	165
19	309	324	347	671	349	430	432	433	277	243	188	166
20	306	319	394	663	344	426	435	424	285	239	187	171
21	306	314	591	656	340	424	439	418	292	235	186	170
22	304	309	886	640	337	421	447	413	297	235	186	169
23	301	306	931	619	334	417	460	409	297	233	184	174
24	299	304	955	600	332	415	472	412	294	228	188	192
25	297	304	903	577	337	412	481	405	297	226	185	183
26	297	304	884	543	339	409	492	397	294	224	183	191
27	294	301	903	519	343	406	513	392	292	224	182	200
28	299	317	883	505	350	403	520	386	292	222	182	202
29	294	326	839	492	------	399	509	382	289	218	179	201
30	289	329	803	477	------	399	498	376	287	218	178	199
31	287	------	759	459	------	397	------	371	------	216	177	------
TOTAL	9,850	9,572	15,523	17,936	10,584	12,723	12,732	13,307	9,111	7,689	5,983	5,265
MEAN	318	319	501	579	378	410	424	429	304	248	193	176
MAX	353	340	955	720	446	432	520	489	365	285	214	202
MIN	287	289	276	452	332	365	376	371	274	216	177	164
CFSM	3.44	3.45	5.42	6.27	4.09	4.44	4.59	4.64	3.29	2.68	2.09	1.90
IN.	3.97	3.85	6.25	7.22	4.26	5.12	5.13	5.36	3.67	3.10	2.41	2.12
AC-FT	19,540	18,990	30,790	35,580	20,990	25,240	25,250	26,390	18,070	15,250	11,870	10,440

CAL YR 1972 TOTAL 240,482 MEAN 657 MAX 1,630 MIN 276 CFSM 7.11 IN 96.82 AC-FT 477,000
WTR YR 1973 TOTAL 130,275 MEAN 357 MAX 955 MIN 164 CFSM 3.86 IN 52.45 AC-FT 258,400

14158790 SMITH RIVER ABOVE SMITH RIVER RESERVOIR, NEAR BELKNAP SPRINGS, OREG.

LOCATION.--Lat 44°20'05", long 122°02'45", in SW¼SW¼ sec. 24, T.14 S., R. 6 E., Linn County, in Willlamette National Forest, on right bank 200 ft (61 m) upstream from Smith River Reservoir, 0.7 mi (1.1 km) downstream from Browder Creek, 10 mi (16 km) north of town of Belknap Springs, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--16.2 mi^2 (42.0 km^2).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,610.00 ft (795.528 m) above mean sea level (levels by Eugene Water and Electric Board). Prior to Sept. 10, 1964, at datum 1.56 ft (0.475 m) higher.

AVERAGE DISCHARGE.--13 years, 93.0 ft^3/s (2.63 m^3/s), 77.96 in/yr (1,980 mm/yr), 67,380 acre-ft/yr (83.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 635 ft^3/s (18.0 m^3/s) Dec. 21, gage height, 7.65 ft (2.332 m); minimum, 3.4 ft^3/s (0.096 m^3/s) Sept. 15-17.

Period of record: Maximum discharge, 5,160 ft^3/s (146 m^3/s) Dec. 22, 1964, gage height, 11.9 ft (3.63 m), from floodmark, from rating curve extended above 560 ft^3/s (15.9 m^3/s), on basis of slope-area measurement of peak flow; minimum, 3.2 ft^3/s (0.091 m^3/s) Sept. 24-29, 1967.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	17	36	84	37	145	44	84	27	18	5.5	4.0
2	5.3	40	37	76	36	120	42	84	24	17	5.3	4.0
3	5.3	66	34	67	34	105	42	87	23	16	5.0	3.8
4	5.0	92	27	59	35	85	46	87	21	15	5.0	3.8
5	4.8	70	24	54	39	82	61	79	19	14	5.0	3.6
6	4.8	49	24	46	42	75	69	76	17	13	4.8	3.6
7	4.8	43	22	38	39	69	67	79	16	12	4.8	8.3
8	4.8	40	20	30	37	64	66	89	15	12	4.6	4.8
9	4.8	45	20	28	36	56	72	84	15	11	4.6	4.2
10	9.3	76	19	26	40	133	82	78	14	11	4.6	4.0
11	8.6	55	18	26	39	114	92	72	13	10	4.4	3.8
12	6.0	43	17	274	38	97	105	72	13	9.3	4.4	3.8
13	7.4	38	15	520	36	85	107	84	12	8.9	4.2	3.6
14	6.8	32	13	384	35	75	99	97	12	8.6	4.4	3.6
15	6.0	27	13	284	34	70	92	96	13	8.6	4.0	3.6
16	5.8	23	20	337	35	72	140	87	24	8.6	4.0	3.4
17	5.5	21	241	252	46	67	157	78	46	8.3	4.0	3.4
18	5.3	21	353	194	44	64	120	67	43	8.0	3.8	4.4
19	5.0	21	552	145	43	63	101	58	39	8.3	3.8	6.8
20	5.0	19	440	118	42	58	92	49	31	8.3	3.8	19
21	5.0	18	575	99	42	55	92	42	26	7.7	3.8	21
22	5.0	17	544	85	41	53	110	37	23	7.4	3.8	19
23	4.8	17	472	76	41	52	116	37	21	7.1	3.8	36
24	4.8	16	400	73	44	51	110	72	19	6.8	8.0	76
25	4.8	22	281	66	84	55	114	66	27	6.5	5.0	57
26	5.8	79	218	58	94	55	130	52	37	6.5	4.6	36
27	5.3	58	235	53	105	53	135	45	27	6.3	4.4	27
28	6.3	51	194	50	114	50	116	41	23	6.0	4.2	23
29	5.5	45	145	47	------	46	99	37	21	5.8	4.2	20
30	5.5	40	118	45	------	49	89	34	19	5.8	4.2	18
31	5.8	------	97	40	------	47	------	30	------	5.5	4.2	------
TOTAL	174.4	1,201	5,224	3,734	1,332	2,275	2,807	2,080	680	297.3	140.2	432.5
MEAN	5.63	40.0	169	120	47.6	73.4	93.6	67.1	22.7	9.59	4.52	14.4
MAX	9.3	92	575	520	114	145	157	97	46	18	8.0	76
MIN	4.8	16	13	26	34	46	42	30	12	5.5	3.8	3.4
CFSM	.35	2.47	10.4	7.41	2.94	4.53	5.78	4.14	1.40	.59	.28	.89
IN.	.40	2.76	12.00	8.57	3.06	5.22	6.45	4.78	1.56	.68	.32	.99
AC-FT	346	2,380	10,360	7,410	2,640	4,510	5,570	4,130	1,350	590	278	858

CAL YR 1972 TOTAL 45,876.1 MEAN 125 MAX 956 MIN 4.6 CFSM 7.72 IN 105.35 AC-FT 91,000
WTR YR 1973 TOTAL 20,377.4 MEAN 55.8 MAX 575 MIN 3.4 CFSM 3.44 IN 46.79 AC-FT 40,420

PEAK DISCHARGE (BASE, 800 CFS).--No peak above base.

14158795 SMITH RIVER RESERVOIR NEAR BELKNAP SPRINGS, OREG.

LOCATION.--Lat 44°18'20", long 122°02'40", in SW¼SW¼ sec.36, T.14 S., R.6 E., Linn County, Willamette National Forest, in intake tower near left end of Smith River Dam on Smith River, 800 ft (244 m) upstream from Bunchgrass Creek, 8 mi (13 km) north of town of Belknap Springs, and at mile 2.1 (3.4 km).

DRAINAGE AREA.--18.2 mi^2 (47.1 km^2).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Telemark with equipment to transmit elevations at 15-minute intervals. Datum of gage is at mean sea level (levels by Eugene Water and Electric Board).

EXTREMES.--Current year: Maximum contents, 14,760 acre-ft (18.2 hm^3) June 30, elevation, 2,603.89 ft (793.666 m); minimum, 11,420 acre-ft (14.1 hm^3) Jan. 7, elevation, 2,582.27 ft (787.076 m).

Period of record: Maximum contents, 15,200 acre-ft (18.7 hm^3) Dec. 22, 1964, elevation, 2,606.5 ft (794.46 m); minimum, 5,700 acre-ft (7.03 hm^3) Apr. 11, 14, 1964, elevation, 2,532.90 ft (772.028 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1963 by Eugene Water and Electric Board; storage began Mar. 18, 1963. Total capacity is 15,000 acre-ft (18.5 hm^3) at elevation 2,605.0 ft (794.0 m), top of spillway gates, and usable capacity is 9,900 acre-ft (12.2 hm^3) between elevations 2,525.0 ft (769.62 m), minimum power pool, and 2,605.0 ft (794.0 m). Storage of 5,100 acre-ft (6.29 hm^3), below elevation 2,525.0 ft (769.62 m), not normally available for release. Water used for power generation. Figures herein represent total contents.

COOPERATION.--Elevations and area-volume curves furnished by Eugene Water and Electric Board.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	2,598.19	13,810	-
Oct. 31	2,597.97	13,780	-30
Nov. 30	2,597.40	13,680	-100
Dec. 31	2,587.72	12,180	-1,500
CAL YR 1972	-	-	+320
Jan. 31	2,583.74	11,620	-560
Feb. 28	2,592.03	12,800	+1,180
Mar. 31	2,595.00	13,300	+500
Apr. 30	2,597.75	13,740	+440
May 31	2,601.90	14,420	+680
June 30	2,602.07	14,450	+30
July 31	2,601.90	14,420	-30
Aug. 31	2,602.27	14,490	+70
Sept.30	2,600.10	14,120	-370
WTR YR 1973	-	-	+310

14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OREG.

LOCATION.--Lat 44°16'05", long 122°02'55", in T.15 S., R.6 E. (unsurveyed), Linn County, in Willamette National Forest, on left bank 0.4 mi (0.6 km) downstream from Trail Bridge Dam, 0.5 mi (0.8 km) upstream from Anderson Creek, 5 mi (8 km) north of town of Belknap Springs, and at mile 81.5 (131.1 km).

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,980.00 ft (603.504 m) above mean sea level (levels by Eugene Water and Electric Board). Prior to Oct. 11, 1963, at datum 5.60 ft (1.707 m) higher.

AVERAGE DISCHARGE.--14 years, 1,050 ft³/s (29.7 m³/s), 77.49 in/yr (1,968 mm/yr), 760,700 acre-ft/yr (938 hm³/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 2,050 ft³/s (58.1 m³/s) Dec. 21, gage height, 8.05 ft (2.454 m); minimum, 507 ft³/s (14.4 m³/s) Aug. 10.

Period of record: Maximum discharge, 11,200 ft³/s (317 m³/s) Dec. 22, 1964, gage height, 12.45 ft (3.795 m), from rating curve extended above 3,700 ft³/s (105 m³/s) on basis of slope-area measurement of peak flow; minimum, 185 ft³/s (5.24 m³/s) Feb. 3, 1963; minimum daily, 425 ft³/s (12.0 m³/s) Nov. 23, 1964.

REMARKS.--Records good. Flow regulated since 1963 by Smith River Reservoir (see station 14158795). Diurnal fluctuations by powerplants and by Trail Bridge reregulating reservoir upstream. Water is diverted from McKenzie River in SW¼ sec.20, T.14 S., R.7 E., to Smith River Reservoir and returned to river above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	822	846	814	1,510	1,040	1,020	958	990	886	758	633	597
2	862	798	846	1,390	1,010	1,050	942	958	838	741	624	597
3	854	879	854	1,350	1,050	1,010	910	950	814	741	615	552
4	838	897	822	1,300	1,010	974	870	982	814	741	606	543
5	790	838	978	1,240	998	966	870	1,040	814	732	615	570
6	830	846	942	1,280	1,040	1,010	918	1,020	814	705	624	651
7	838	846	933	1,120	966	966	950	1,010	814	678	633	615
8	830	838	806	1,130	982	958	926	1,010	798	732	696	579
9	774	879	798	1,140	1,010	982	918	998	774	741	642	597
10	870	915	987	1,020	966	1,100	910	982	750	714	543	606
11	830	854	987	1,100	950	1,050	910	958	741	678	552	642
12	750	814	888	1,280	934	1,030	918	942	750	669	642	597
13	888	906	750	1,720	934	1,030	950	942	790	714	669	579
14	806	822	718	1,660	910	998	982	942	782	723	651	570
15	742	798	750	1,450	894	950	974	998	732	669	606	570
16	806	838	806	1,540	886	990	1,010	998	732	651	570	570
17	822	830	1,010	1,560	886	1,050	1,090	982	798	678	552	570
18	806	822	1,120	1,460	886	1,020	1,050	990	790	687	606	570
19	774	806	1,580	1,410	886	982	1,020	950	782	687	633	570
20	766	790	1,520	1,340	918	966	982	918	750	687	633	579
21	798	846	1,780	1,370	878	1,010	982	918	750	678	624	597
22	814	774	1,930	1,280	894	1,030	1,010	918	766	642	570	660
23	742	782	1,840	1,260	918	942	1,050	902	782	642	552	687
24	742	782	1,950	1,300	854	950	1,050	926	782	651	588	732
25	790	838	1,730	1,210	910	990	1,040	958	806	669	624	696
26	790	894	1,620	1,180	894	950	1,070	942	814	642	624	696
27	774	879	1,680	1,160	886	950	1,110	902	774	624	615	624
28	798	806	1,650	1,170	902	974	1,130	870	732	642	561	678
29	806	862	1,620	1,120	------	926	1,140	870	723	669	552	633
30	750	830	1,590	1,110	------	886	1,080	870	790	651	579	588
31	688	------	1,590	1,080	------	966	------	886	------	651	597	------
TOTAL	24,790	25,155	37,889	40,240	26,292	30,676	29,720	29,522	23,482	21,287	18,831	18,225
MEAN	800	839	1,222	1,298	939	990	991	952	783	687	607	608
MAX	888	915	1,950	1,720	1,050	1,100	1,140	1,040	886	758	696	732
MIN	688	774	718	1,020	854	886	870	870	723	624	543	543
AC-FT	49,170	49,890	75,150	79,820	52,150	60,850	58,950	58,560	46,580	42,220	37,350	36,150
MEAN†	799	837	1,198	1,332	918	998	998	963	783	686	609	601
CFSM†	4.34	4.55	6.51	7.24	4.99	5.42	5.42	5.23	4.26	3.73	3.31	3.27
IN.†	5.01	5.07	7.51	8.08	5.20	6.25	6.05	6.04	4.75	4.30	3.81	3.65
AC-FT†	49,140	49,790	73,650	79,260	50,970	61,350	59,390	59,240	46.610	42,190	37,420	35,780

CAL YR 1972 TOTAL 497,975 MEAN 1,361 MAX 3,630 MIN 674 AC-FT 987,700 MEAN† 1,361 CFSM† 7.40 IN.† 100.71 AC-FT† 988,020
WTR YR 1973 TOTAL 326,109 MEAN 893 MAX 1,950 MIN 543 AC-FT 646,800 MEAN† 894 CFSM† 4.86 IN.† 65.96 AC-FT† 647.110

† Adjusted for change in contents in Smith River Reservoir.

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OREG.

LOCATION.--Lat 44°10'45", long 122°07'45", on line between NE¼ and NW¼ sec.18, T.16 S., R.6 E., Lane County, Willamette National Forest, on left bank 1.0 mi (1.6 km) upstream from Glen Creek, 1.7 mi (2.7 km) east of town of McKenzie Bridge, and at mile 69.9 (112.5 km).

DRAINAGE AREA.--348 mi^2 (901 km^2) at cableway 1.2 mi (1.9 km) upstream, where all discharge measurements are made.

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "near McKenzie Bridge" August 1910 to September 1911 and October 1914 to September 1916.

GAGE.--Water-stage recorder. Datum of gage is 1,419.04 ft (432.523 m) above mean sea level. Prior to June 2, 1932, nonrecording gage at several sites within 2 mi (3 km) of present site at various datums.

AVERAGE DISCHARGE.--63 years, 1,675 ft^3/s (47.4 m^3/s), 1,214,000 acre-ft/yr (1.50 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,090 ft^3/s (116 m^3/s) Dec. 21, gage height, 3.35 ft (1.021 m); minimum, 989 ft^3/s (28.0 m^3/s) Aug. 10, Sept. 3, 4, 17, 30.

Period of record: Maximum discharge, 19,100 ft^3/s (541 m^3/s) Dec. 22, 1964, gage height, 10.36 ft (3.158 m), from rating curve extended above 7,100 ft^3/s (201 m^3/s) on basis of slope-area measurement of peak flow; minimum, 805 ft^3/s (22.8 m^3/s) Oct. 20, 1931.

REMARKS.--Records good. Flow regulated since 1963 by Smith River Reservoir (see station 14158795). No diversion above station. All records given herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 1248: 1911-16, 1920-25. WSP [illegible]48: 1919. WSP 1638: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.340	1.320	1.310	2.420	1.680	1.690	1.500	1.550	1.420	1.320	1.130	1.050
2	1.370	1.410	1.360	2.230	1.640	1.710	1.470	1.500	1.380	1.290	1.120	1.050
3	1.370	1.420	1.380	2.140	1.680	1.640	1.440	1.500	1.350	1.290	1.120	1.030
4	1.350	1.550	1.320	2.050	1.660	1.580	1.390	1.550	1.340	1.290	1.110	1.020
5	1.300	1.460	1.460	1.950	1.630	1.550	1.400	1.590	1.340	1.280	1.120	1.030
6	1.330	1.430	1.430	1.970	1.690	1.590	1.450	1.570	1.340	1.260	1.120	1.080
7	1.340	1.400	1.420	1.780	1.590	1.540	1.480	1.560	1.340	1.230	1.120	1.080
8	1.340	1.390	1.300	1.750	1.580	1.510	1.450	1.590	1.340	1.260	1.140	1.030
9	1.290	1.410	1.270	1.780	1.610	1.540	1.450	1.570	1.310	1.270	1.120	1.030
10	1.370	1.500	1.440	1.660	1.580	1.840	1.440	1.540	1.300	1.250	1.060	1.030
11	1.370	1.420	1.470	1.750	1.560	1.760	1.440	1.520	1.290	1.220	1.060	1.070
12	1.260	1.350	1.370	2.250	1.530	1.690	1.460	1.490	1.300	1.200	1.120	1.040
13	1.390	1.430	1.250	3.470	1.520	1.690	1.510	1.520	1.340	1.230	1.120	1.020
14	1.330	1.360	1.210	3.220	1.490	1.620	1.520	1.530	1.340	1.240	1.120	1.020
15	1.250	1.310	1.230	2.720	1.460	1.550	1.510	1.560	1.300	1.190	1.100	1.020
16	1.310	1.340	1.300	2.930	1.450	1.590	1.610	1.560	1.330	1.180	1.060	1.010
17	1.320	1.330	1.860	2.850	1.470	1.650	1.770	1.540	1.430	1.190	1.050	998
18	1.310	1.320	2.200	2.600	1.460	1.630	1.680	1.530	1.410	1.200	1.080	1.010
19	1.280	1.310	3.130	2.450	1.450	1.580	1.640	1.480	1.380	1.200	1.100	1.020
20	1.260	1.290	3.080	2.290	1.450	1.550	1.580	1.450	1.340	1.200	1.100	1.040
21	1.280	1.340	3.750	2.260	1.430	1.580	1.570	1.440	1.330	1.200	1.100	1.030
22	1.300	1.270	3.920	2.130	1.430	1.610	1.620	1.440	1.340	1.160	1.050	1.080
23	1.250	1.280	3.680	2.050	1.470	1.510	1.680	1.430	1.350	1.160	1.030	1.130
24	1.230	1.270	3.730	2.100	1.400	1.500	1.670	1.520	1.340	1.160	1.070	1.250
25	1.270	1.280	3.210	1.990	1.460	1.530	1.660	1.540	1.370	1.170	1.090	1.200
26	1.290	1.420	2.900	1.920	1.470	1.500	1.690	1.490	1.420	1.150	1.080	1.070
27	1.260	1.400	2.990	1.860	1.470	1.490	1.740	1.450	1.350	1.140	1.080	1.060
28	1.300	1.340	2.890	1.860	1.490	1.510	1.750	1.400	1.310	1.140	1.040	1.100
29	1.310	1.370	2.730	1.790	------	1.460	1.720	1.400	1.290	1.170	1.030	1.070
30	1.260	1.340	2.620	1.790	------	1.430	1.660	1.390	1.340	1.140	1.040	1.020
31	1.180	------	2.550	1.740	------	1.500	------	1.410	------	1.140	1.050	------
TOTAL	40.410	41.060	66.760	67.750	42.800	49.120	46.950	46.610	40.360	37.520	33.730	31.688
MEAN	1.304	1.369	2.154	2.185	1.529	1.585	1.565	1.504	1.345	1.210	1.088	1.056
MAX	1.390	1.550	3.920	3.470	1.690	1.840	1.770	1.590	1.430	1.320	1.140	1.250
MIN	1.180	1.270	1.210	1.660	1.400	1.430	1.390	1.390	1.290	1.140	1.030	998
AC-FT	80.150	81.440	132.400	134.400	84.890	97.430	93.130	92.450	80.050	74.420	66.900	62.850

CAL YR 1972 TOTAL 842.610 MEAN 2.302 MAX 8.330 MIN 1.180 AC-FT 1.671.000
WTR YR 1973 TOTAL 544.758 MEAN 1.492 MAX 3.920 MIN 998 AC-FT 1.081.000

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OREG.

LOCATION.--Lat 44°02'50", long 122°13'00", in T.17 S., R.5 E. (unsurveyed), Lane County, in Willamette National Forest, on right bank 100 ft (30 m) upstream from Tipsoo Creek, 8.0 mi (12.9 km) south of Rainbow, 9.0 mi (14.5 km) southeast of town of Blue River, and at mile 10.4 (16.7 km). Records include flow of Tipsoo Creek.

DRAINAGE AREA.--160 mi^2 (414 km^2) at cableway 0.2 mi (0.3 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1971, published as South Fork McKenzie River above Cougar Reservoir.

GAGE.--Water-stage recorder. Datum of gage is 1,709.51 ft (521.059 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--16 years, 635 ft^3/s (18.0 m^3/s), 53.90 in/yr (1,369 mm/yr), 460,100 acre-ft/yr (567 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,430 ft^3/s (68.8 m^3/s) Dec. 19, gage height, 7.70 ft (2.347 m); minimum, 183 ft^3/s (5.18 m^3/s) Sept. 16.

Period of record: Maximum discharge, 18,400 ft^3/s (521 m^3/s) Dec. 22, 1964, gage height, 20.06 ft (6.114 m), from floodmark, from rating curve extended above 7,600 ft^3/s (215 m^3/s), on basis of slope-area measurement of peak flow; minimum, 191 ft^3/s (5.41 m^3/s) Oct. 10, 11, 1966.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report. All records given herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 1638: Drainage area. WSP 1935: 1958 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	259	311	623	460	560	441	644	340	254	201	190
2	243	305	314	623	448	537	430	636	327	251	201	190
3	241	330	327	577	441	519	426	657	318	246	201	187
4	241	460	305	526	463	500	437	707	308	243	198	187
5	238	482	292	504	489	474	478	661	300	241	198	187
6	235	375	292	474	497	467	504	640	292	238	198	187
7	232	334	278	441	474	448	485	632	286	235	198	216
8	232	334	260	419	456	430	471	670	281	232	196	201
9	235	330	260	415	445	426	482	653	276	230	201	194
10	281	359	260	404	460	699	500	619	270	227	196	192
11	314	337	260	456	452	695	522	590	268	227	196	190
12	265	311	268	1,090	441	623	590	602	270	225	194	187
13	284	300	259	2,010	423	581	729	653	278	223	194	187
14	268	286	251	1,640	415	541	674	703	273	220	192	187
15	254	278	251	1,330	404	515	636	707	276	218	192	187
16	246	270	300	1,390	394	519	748	682	300	216	192	185
17	246	265	1,050	1,250	437	508	946	649	404	216	192	185
18	241	268	1,270	1,080	430	497	861	598	382	214	192	190
19	238	270	1,880	922	419	508	814	552	353	216	192	205
20	235	268	1,880	819	404	489	762	508	327	216	192	232
21	235	265	2,050	748	391	482	725	463	308	214	192	223
22	235	265	2,170	682	388	467	791	426	297	212	192	218
23	232	259	1,900	632	382	452	823	411	289	212	192	297
24	230	257	1,830	623	382	445	781	534	281	209	205	497
25	230	268	1,440	611	401	452	767	548	289	207	209	474
26	235	441	1,150	556	423	448	805	463	303	207	198	305
27	232	415	1,100	530	445	445	828	423	281	205	194	259
28	246	375	999	511	463	434	786	398	270	205	194	236
29	238	353	852	497	------	415	725	375	265	203	192	225
30	235	327	762	497	------	437	678	362	259	203	192	220
31	232	------	682	482	------	456	------	353	------	201	192	------
TOTAL	7,595	9,646	25,503	23,362	12,127	15,469	19,645	17,519	8,971	6,866	6,068	6,822
MEAN	245	322	823	754	433	499	655	565	299	221	196	227
MAX	314	482	2,170	2,010	497	699	946	707	404	254	209	497
MIN	230	257	251	404	382	415	426	353	259	201	192	185
CFSM	1.53	2.01	5.14	4.71	2.71	3.12	4.09	3.53	1.87	1.38	1.23	1.42
IN.	1.77	2.24	5.93	5.43	2.82	3.60	4.57	4.07	2.09	1.60	1.41	1.59
AC-FT	15,060	19,130	50,590	46,340	24,050	30,680	38,970	34,750	17,790	13,620	12,040	13,530

CAL YR 1972 TOTAL 313,805 MEAN 857 MAX 6,400 MIN 230 CFSM 5.36 IN 72.96 AC-FT 622,400
WTR YR 1973 TOTAL 159,593 MEAN 437 MAX 2,170 MIN 185 CFSM 2.73 IN 37.11 AC-FT 316,600

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

14159400 COUGAR LAKE NEAR RAINBOW, OREG.

LOCATION.--Lat 44°07'40", long 122°14'25", in SE¼SE¼ sec.31, T.16 S., R.5 E., Lane County, Willamette National Forest, in intake tower near left end of Cougar Dam on South Fork McKenzie River, 2.7 mi (4.3 km) south of Rainbow, and at mile 4.5 (7.2 km).

DRAINAGE AREA.--207 mi² (536 km²).

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1971, published as Cougar Reservoir near Rainbow.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 202,200 acre-ft (249 hm³) June 29, elevation, 1,685.47 ft (513.731 m); minimum, 55,680 acre-ft (68.7 hm³) Dec. 13, elevation, 1,518.45 ft (462.824 m).

Period of record: Maximum contents, 214,000 acre-ft (264 hm³) July 13, 1966, elevation, 1,694.93 ft (516.615 m); minimum, 33,690 acre-ft (41.5 hm³) Oct. 31 to Nov. 2, 1965, elevation, 1,475.40 ft (449.702 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1963 by the Corps of Engineers; storage began September 1963. Total capacity is 219,100 acre-ft (270 hm³) at elevation 1,699 ft (517.9 m), maximum pool, and usable capacity is 164,800 acre-ft (203 hm³) between elevations 1,516 ft (462.1 m), minimum power pool, and 1,699 ft (517.9 m). Reservoir used for flood control and power generation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,510	50,920	1,650	162,300
1,550	75,940	1,695	214,000
1,600	114,800		

CONTENTS. IN ACRE-FEET. AT 2400. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139.100	93.670	67.750	66.350	68.560	90.880	121.600	166.300	197.900	202.000	194.700	167.800
2	138.000	92.340	67.220	65.520	69.320	92.010	122.300	167.600	198.200	201.900	194.400	166.400
3	136.800	91.040	65.860	65.600	69.880	93.050	123.000	169.000	198.600	201.700	194.100	165.000
4	135.600	90.200	64.730	65.880	70.580	94.030	123.900	170.500	198.900	201.600	193.800	163.600
5	134.200	89.350	63.270	66.120	71.330	94.950	124.700	171.900	199.000	201.400	193.500	162.100
6	132.800	88.110	61.800	66.270	72.140	95.890	125.600	173.300	199.000	201.200	193.200	160.800
7	131.200	86.820	60.230	66.330	73.050	96.750	126.500	174.600	198.900	201.000	192.900	159.500
8	129.800	86.390	58.790	66.310	73.910	97.580	127.300	176.100	198.800	200.800	192.600	158.000
9	128.300	85.040	58.400	66.290	74.760	98.460	128.200	177.400	198.700	200.600	192.200	156.600
10	127.000	83.770	57.870	65.640	75.650	100.200	129.300	178.700	198.600	200.400	191.900	155.200
11	125.800	82.280	56.260	64.850	76.470	101.700	130.500	179.900	198.400	200.200	191.600	153.700
12	124.400	80.800	55.700	66.330	77.310	103.200	131.900	181.200	198.400	200.000	191.300	152.300
13	123.000	79.250	55.680	71.070	78.080	104.500	133.700	182.600	198.300	199.800	191.000	150.800
14	121.700	77.620	55.700	74.800	78.850	105.600	135.200	184.100	198.200	199.500	190.700	149.300
15	120.200	75.940	55.730	76.450	79.540	106.700	136.600	185.600	198.100	199.300	190.400	148.200
16	118.800	74.270	56.040	74.970	80.250	107.800	138.500	187.200	198.300	199.000	189.500	147.000
17	117.300	72.500	59.170	69.320	81.090	108.800	140.900	188.500	198.800	198.800	188.100	145.600
18	115.800	70.790	61.450	64.930	81.910	109.800	143.200	189.700	199.300	198.500	186.800	144.100
19	114.200	68.950	65.450	63.950	82.680	110.800	145.200	190.700	199.800	198.300	185.400	142.700
20	112.700	67.250	67.080	64.070	83.540	111.700	147.000	191.700	200.200	198.000	184.100	141.400
21	111.100	66.830	70.520	64.060	84.240	112.700	148.700	192.200	200.600	197.800	182.700	140.000
22	109.600	66.460	72.720	64.030	84.930	113.500	150.600	192.500	200.900	197.500	181.400	138.600
23	108.000	66.300	74.760	64.080	85.600	114.300	152.600	192.900	201.100	197.200	180.000	137.600
24	106.400	66.270	78.240	64.180	86.280	115.200	154.400	193.600	201.100	197.100	178.800	137.100
25	104.800	66.260	80.420	64.130	87.020	116.000	156.200	194.600	201.300	196.800	177.500	136.400
26	103.200	66.760	80.170	64.430	87.840	116.800	158.100	195.500	201.600	196.500	176.100	135.200
27	101.600	67.120	77.790	65.140	88.680	117.600	160.000	196.300	201.900	196.200	174.800	133.900
28	100.200	67.400	74.400	65.800	89.600	118.400	161.800	197.100	202.100	196.000	173.400	132.500
29	98.580	67.580	71.460	66.480	------	119.100	163.500	197.700	202.200	195.700	172.000	131.100
30	96.800	67.640	69.740	67.230	------	119.900	164.900	197.500	202.100	195.300	170.600	129.600
31	95.150	------	68.040	67.920	------	120.700	------	197.700	------	195.000	169.200	------
MAX	139.100	93.670	80.420	76.450	89.600	120.700	164.900	197.700	202.200	202.000	194.700	167.800
MIN	95.150	66.260	55.680	63.950	68.560	90.880	121.600	166.300	197.900	195.000	169.200	129.600
(†)	1,576.09	1,537.85	1,538.39	1,538.21	1,568.84	1,606.86	1,652.46	1,681.71	1,685.37	1,679.45	1,656.54	1,616.72
(‡)	-45,350	-27,460	+350	-120	+21,680	+31,100	+44,200	+32,800	+4,400	-7,100	-25,800	-39,600

CAL YR 1972 MAX 210.800 MIN 55.380 AC-FT‡ + 9,140
WTR YR 1973 MAX 202.200 MIN 55.680 AC-FT‡ -10,900

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OREG.

LOCATION.--Lat 44°08'10", long 122°14'30", in NE¼ sec.31, T.16 S., R.5 E., Lane County, in Willamette National Forest, on right bank 0.2 mi (0.3 km) upstream from Cougar Creek, 0.6 mi (1.0 km) downstream from Cougar Dam, 2.1 mi (3.4 km) south of Rainbow, and at mile 3.9 (6.3 km).

DRAINAGE AREA.--208 mi² (539 km²).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,236.42 ft (376.861 m) above mean sea level (Bureau of Public Roads bench mark). Oct. 1 to Nov. 4, 1947, nonrecording gage at site 40 ft (12 m) upstream at datum 0.80 ft (0.244 m) higher.

AVERAGE DISCHARGE.--26 years, 888 ft³/s (25.1 m³/s), 57.98 in/yr (1,473 mm/yr), 643,400 acre-ft/yr (793 hm³/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 4,700 ft³/s (133 m³/s) Jan. 17, gage height, 4.59 ft (1.399 m); minimum, 57 ft³/s (1.61 m³/s) Apr. 15; minimum daily, 97 ft³/s (2.75 m³/s) May 16.

Period of record: Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 11, 1956, gage height, 8.66 ft (2.640 m), from rating curve extended above 8,100 ft³/s (229 m³/s); maximum gage height, 8.90 ft (2.713 m) Dec. 22, 1955 (backwater from debris); minimum discharge, 17 ft³/s (0.48 m³/s) Nov. 18, 1963; minimum daily, 97 ft³/s (2.75 m³/s) May 16, 1973.

Maximum discharge, 24,500 ft³/s (694 m³/s) Dec. 28, 1945, gage height, 8.8 ft (2.68 m), from floodmarks, at Corps of Engineers gage at site 40 ft (12 m) upstream at datum 0.80 ft (0.244 m) higher; gage height at present site and datum, about 9.3 ft (2.83 m), computed by Corps of Engineers.

REMARKS.--Records good. Flow regulated since 1963 by Cougar Lake (see station 14159400), usable capacity, 165,000 acre-ft (203 hm³). No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1638: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	902	1.040	374	1.600	267	168	193	114	296	350	355	821
2	794	1.040	684	1.240	264	163	190	112	199	346	360	821
3	803	1.050	1.050	729	267	168	190	114	203	346	360	830
4	803	1.060	902	554	271	168	193	110	203	346	355	830
5	911	1.060	1.030	536	267	163	196	110	283	350	360	830
6	911	1.060	1.070	536	249	163	206	110	350	355	360	839
7	920	1.070	1.060	536	168	163	203	112	350	350	331	839
8	920	656	965	542	171	163	206	112	350	350	360	839
9	920	1.070	500	542	168	163	196	112	350	350	336	839
10	929	1.080	548	830	165	165	101	112	350	350	346	848
11	929	1.090	995	985	165	163	108	112	355	355	346	848
12	929	1.100	604	995	165	163	114	108	350	350	346	848
13	938	1.100	317	911	168	163	112	110	350	350	346	848
14	938	1.110	300	670	165	163	112	112	350	350	346	857
15	938	1.120	300	1.050	168	187	110	110	350	350	346	721
16	947	1.130	304	2.680	160	193	112	97	350	355	629	684
17	947	1.140	312	4.460	163	196	112	108	355	355	794	866
18	956	1.120	684	3.540	163	193	112	110	271	355	794	866
19	956	1.120	1.040	1.630	160	193	114	110	221	355	803	866
20	965	1.090	2.010	920	163	196	112	110	224	355	803	866
21	965	517	1.360	884	163	199	114	235	224	355	812	866
22	975	478	2.120	794	155	196	112	326	224	350	812	866
23	975	379	1.860	698	155	196	114	326	279	355	803	875
24	985	331	995	677	158	193	116	326	350	308	812	875
25	995	350	965	729	158	193	114	187	271	355	812	875
26	995	398	1.590	511	158	196	114	112	224	355	812	875
27	1.010	408	2.680	304	165	196	114	112	224	355	812	866
28	1.010	360	3.070	304	168	196	114	112	221	360	812	875
29	1.020	374	2.560	287	------	196	114	174	279	355	812	875
30	1.020	374	1.800	264	------	196	114	451	346	360	821	884
31	1.030	------	1.630	264	------	193	------	322	------	360	830	------
TOTAL	29.236	25.275	35.679	31.202	5.177	5.607	4.132	4.888	8.752	10.891	18.026	25.338
MEAN	943	843	1.151	1.007	185	181	138	158	292	351	581	845
MAX	1.030	1.140	3.070	4.460	271	199	206	451	355	360	830	884
MIN	794	331	300	264	155	163	101	97	199	308	331	684
AC-FT	57.990	50.130	70.770	61.890	10.270	11.120	8.200	9.700	17.360	21.600	35.750	50.260
MEAN†	206	381	1,157	1,005	575	687	881	691	366	236	162	179
CFSM†	.99	1.83	5.56	4.83	2.76	3.30	4.24	3.32	1.76	1.13	.78	.86
IN.†	1.14	2.06	6.41	5.57	2.88	3.81	4.72	3.83	1.96	1.31	.90	.96
AC-FT†	12,640	22.670	71,120	61,770	31,950	42,220	52,400	42,300	21,760	14,500	9,950	10,660

CAL YR 1972 TOTAL 410,326 MEAN 1,121 MAX 6,050 MIN 136 AC-FT 813,900 MEAN† 1,134 CFSM† 5.45 IN.† 74.21 AC-FT† 823,040
WTR YR 1973 TOTAL 204,203 MEAN 559 MAX 4,460 MIN 97 AC-FT 405,000 MEAN† 564 CFSM† 2.62 IN.† 35.53 AC-FT† 396,100

† Adjusted for change in contents of Cougar Lake.

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OREG.

LOCATION.--Lat 44°13'05", long 122°15'50", in SE¼NE¼ sec.36, T.15 S., R.4 E., Lane County, in Willamette National Forest, on left bank 0.2 mi (0.3 km) downstream from Tidbits Creek, 5.5 mi (8.8 km) northeast of town of Blue River, and at mile 8.5 (13.7 km).

DRAINAGE AREA.--45.8 mi² (118.6 km²).

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,386.90 ft (422.727 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--10 years, 263 ft³/s (7.45 m³/s), 77.98 in/yr (1,981 mm/yr), 190,500 acre-ft/yr (235 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,540 ft³/s (71.9 m³/s) Jan. 13, gage height, 7.01 ft (2.137 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 16, 17.

Period of record: Maximum discharge, 12,400 ft³/s (351 m³/s) Dec. 22, 1964, gage height, 15.32 ft (4.670 m), from floodmarks, from rating curve extended above 2,800 ft³/s (79.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 8.2 ft³/s (0.23 m³/s) Sept. 28, 29, Oct. 2-4, 1965.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	78	86	235	150	414	185	136	60	53	19	13
2	20	220	91	230	146	349	175	130	57	50	19	13
3	19	220	104	203	146	293	168	128	54	47	18	13
4	18	284	86	170	162	257	178	124	53	45	18	13
5	17	230	77	156	205	230	203	112	50	42	18	12
6	16	150	74	138	238	213	203	107	48	41	18	12
7	16	118	67	124	203	190	178	107	46	39	18	24
8	16	120	65	112	173	173	160	126	44	37	17	19
9	15	112	65	108	156	166	158	120	42	36	16	15
10	22	200	60	105	183	418	158	110	40	34	16	13
11	31	148	60	178	195	356	160	102	40	33	16	13
12	20	107	55	1.150	185	281	162	99	39	32	16	13
13	26	91	50	2.170	173	248	160	100	39	32	14	12
14	25	77	46	1.250	160	220	144	100	38	30	14	12
15	20	67	46	748	152	200	132	97	44	29	14	12
16	18	59	65	970	144	215	210	89	65	29	14	11
17	18	56	1.280	766	166	218	302	83	170	28	13	10
18	17	57	1.230	555	160	205	266	77	148	28	13	12
19	16	67	1.690	414	148	225	254	71	110	27	13	20
20	16	62	1.280	323	136	215	248	67	89	27	13	60
21	16	58	1.780	269	128	200	243	62	75	26	13	55
22	16	57	1.680	230	122	198	302	59	68	25	13	60
23	15	53	1.370	203	116	188	299	60	63	25	13	120
24	15	52	1.300	213	114	185	257	158	58	24	24	311
25	15	67	856	230	178	198	240	168	68	23	25	213
26	16	233	595	193	190	188	243	112	91	23	17	107
27	17	170	832	170	203	170	228	94	72	22	16	71
28	29	134	715	154	223	160	195	83	64	20	15	56
29	31	112	470	148	------	148	166	74	59	20	14	47
30	29	97	349	164	------	160	150	68	54	19	13	41
31	24	------	281	168	------	198	------	64	------	19	13	------
TOTAL	609	3.556	16.805	12.247	4.655	7.079	6.127	3.087	1.948	965	493	1.403
MEAN	19.6	119	542	395	166	228	204	99.6	64.9	31.1	15.9	46.8
MAX	31	284	1.780	2.170	238	418	302	168	170	53	25	311
MIN	15	52	46	105	114	148	132	59	38	19	13	10
CFSM	.43	2.60	11.8	8.62	3.62	4.98	4.45	2.17	1.42	.68	.35	1.02
IN.	.49	2.89	13.65	9.95	3.78	5.75	4.98	2.51	1.58	.78	.40	1.14
AC-FT	1.210	7.050	33.330	24.290	9.230	14.040	12.150	6.120	3.860	1.910	978	2.780

CAL YR 1972 TOTAL 132.841 MEAN 363 MAX 5.240 MIN 12 CFSM 7.93 IN 107.90 AC-FT 263.500
WTR YR 1973 TOTAL 58.974 MEAN 162 MAX 2.170 MIN 10 CFSM 3.54 IN 47.90 AC-FT 117.000

PEAK DISCHARGE (BASE, 2,000 CFS).--Dec. 21 (0130) 2,300 cfs (6.81 ft); Jan. 13 (1200) 2,540 cfs (7.01 ft).

14161500 LOOKOUT CREEK NEAR BLUE RIVER, OREG.

LOCATION.--Lat 44°12'35", long 122°15'20", in T.15 or 16 S., R.5 E. (unsurveyed), Lane County, in Willamette National Forest, on left bank 6.0 mi (9.7 km) northeast of town of Blue River, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--24.1 mi^2 (62.4 km^2).

PERIOD OF RECORD.--August 1949 to September 1955, September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,377.76 ft (419.941 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--16 years, 131 ft^3/s (3.71 m^3/s), 73.82 in/yr (1,875 mm/yr), 94,910 acre-ft/yr (117 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 822 ft^3/s (23.3 m^3/s) Dec. 20, gage height, 4.82 ft (1.469 m); minimum, 8.3 ft^3/s (0.235 m^3/s) Sept. 16, 17.

Period of record: Maximum discharge, 6,660 ft^3/s (189 m^3/s) Dec. 22, 1964, gage height, 8.88 ft (2.707 m), from rating curve extended above 1,300 ft^3/s (36.8 m^3/s), on basis of slope-area measurement of peak flow; minimum, 6.4 ft^3/s (0.181 m^3/s) Nov. 25-30, 1952.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	33	36	128	84	118	79	78	31	31	13	10
2	13	64	43	123	80	114	75	75	30	29	13	10
3	13	59	48	108	77	105	73	73	29	28	13	10
4	13	86	41	95	84	98	72	74	27	26	13	10
5	12	84	39	87	93	92	77	68	26	26	13	9.7
6	12	66	38	79	98	88	79	65	25	25	12	9.7
7	12	51	34	71	90	83	76	63	25	24	12	14
8	12	55	32	66	83	79	74	75	23	23	12	12
9	12	53	32	62	79	77	74	71	23	23	12	10
10	14	73	30	61	86	153	74	65	23	22	12	10
11	19	61	30	79	86	144	77	61	23	21	11	9.7
12	14	49	28	266	83	126	82	60	23	20	11	9.3
13	18	44	26	678	77	116	95	62	23	20	11	9.0
14	16	38	24	480	75	106	83	63	22	19	11	9.0
15	14	34	24	328	71	98	76	60	25	19	10	9.0
16	13	31	32	356	68	97	107	55	34	18	10	8.3
17	13	29	260	302	73	92	138	51	61	18	10	8.3
18	13	31	348	242	71	91	127	46	54	17	10	10
19	12	31	472	193	67	96	127	43	47	17	10	12
20	12	29	490	164	64	93	122	39	40	17	10	24
21	12	28	625	141	61	92	115	37	37	17	10	21
22	12	27	642	124	60	89	121	35	34	17	10	23
23	12	26	575	112	57	84	122	35	32	16	10	37
24	11	25	525	112	57	80	116	59	31	16	15	62
25	11	30	388	112	63	79	113	58	36	15	14	53
26	12	55	281	99	68	77	117	47	54	15	12	35
27	12	48	308	92	73	74	112	41	43	14	11	29
28	17	45	284	86	80	72	100	38	38	14	11	24
29	17	42	217	81	------	68	90	36	35	14	11	23
30	16	38	177	87	------	74	83	34	33	13	10	22
31	15	------	149	89	------	81	------	32	------	13	10	------
TOTAL	417	1.361	6.278	5.101	2.108	2.936	2.876	1.699	987	607	353	542.0
MEAN	13.5	45.4	203	165	75.3	94.7	95.9	54.8	32.9	19.6	11.4	18.1
MAX	19	86	642	678	98	153	138	78	61	31	15	62
MIN	11	25	24	61	57	68	72	32	22	13	10	8.3
CFSM	.56	1.88	8.42	6.85	3.12	3.93	3.98	2.27	1.37	.81	.47	.75
IN.	.64	2.10	9.69	7.87	3.25	4.53	4.44	2.62	1.52	.94	.54	.84
AC-FT	827	2.700	12.450	10.120	4.180	5.820	5.700	3.370	1.960	1.200	700	1.080

CAL YR 1972 TOTAL 58.022.00 MEAN 159 MAX 642 MIN 0 CFSM 6.60 IN 89.56 AC-FT 115.100
WTR YR 1973 TOTAL 25.265.00 MEAN 69.2 MAX 678 MIN 8.3 CFSM 2.87 IN 39.00 AC-FT 50.110

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

14162100 BLUE RIVER LAKE NEAR BLUE RIVER, OREG.

LOCATION.--Lat 44°10'20", long 122°19'40", in SE¼SE¼ sec.16, T.16 S., R.4 E., Lane County, in intake tower near left end of Blue River Dam on Blue River, 1.4 mi (2.3 km) north of town of Blue River, and at mile 1.7 (2.7 km).

DRAINAGE AREA.--87.3 mi² (226.1 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1971, published as Blue River Reservoir near Blue River.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 83,710 acre-ft (103 hm³) June 29, elevation, 1,350.94 ft (411.767 m); minimum, 3,950 acre-ft (4.87 hm³) Jan. 3, elevation, 1,179.87 ft (359.624 m).
Period of record: Maximum contents, 85,360 acre-ft (105 hm³) July 29, 1969, elevation, 1,352.68 ft (412.297 m); minimum observed since first filling in 1968, 1,580 acre-ft (1.95 hm³) Feb. 3, 1969, elevation, 1,156.0 ft (352.35 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1968 by Corps of Engineers; storage began October 1968. Total capacity is 89,520 acre-ft (110 hm³) at elevation 1,357 ft (413.6 m), maximum pool, and usable capacity is 85,550 acre-ft (105 hm³) between elevations 1,180 ft (359.7 m), minimum flood control pool, and 1,357 ft (413.6 m), maximum pool. Reservoir used for flood control. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,156	1,580	1,200	7,030	1,290	36,960
1,160	1,870	1,210	8,900	1,340	73,710
1,180	3,970	1,250	19,260	1,353	85,660

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.900	16.030	4.010	3.990	12.470	26.960	49.760	71.400	80.520	83.520	53.060	31.750
2	22.660	15.660	4.040	3.990	13.030	28.050	50.340	71.870	80.610	83.400	51.990	31.190
3	22.540	14.670	4.030	3.990	13.560	28.940	50.860	72.340	80.670	83.200	50.910	30.640
4	22.390	13.790	3.990	4.000	14.170	29.740	51.420	72.770	80.730	82.780	49.830	30.060
5	22.240	12.900	4.020	3.980	14.910	30.470	52.040	73.170	80.770	82.150	48.680	29.480
6	22.090	11.900	4.050	4.000	15.680	31.150	52.670	73.550	80.820	81.420	47.570	28.910
7	21.940	10.880	4.010	4.030	16.280	31.750	53.190	73.930	80.850	80.520	46.540	28.350
8	21.790	9.890	4.010	4.030	16.790	32.240	53.670	74.410	80.880	79.570	45.720	27.440
9	21.640	8.900	4.050	4.030	17.240	32.820	54.160	74.830	80.890	78.620	45.010	26.350
10	21.530	7.880	3.990	4.020	17.780	34.330	54.700	75.250	80.920	77.660	44.280	25.250
11	21.420	6.790	3.990	4.080	18.340	35.600	55.230	75.600	80.920	76.650	43.680	24.160
12	21.290	5.680	4.000	6.210	18.870	36.590	55.850	75.930	80.950	75.560	43.160	23.070
13	21.200	4.850	3.980	11.800	19.360	37.460	56.420	76.280	80.960	74.420	42.580	21.990
14	21.070	4.720	4.000	14.300	19.820	38.670	56.950	76.630	80.990	73.160	42.000	20.960
15	20.920	4.200	4.010	12.980	20.240	38.940	57.410	76.960	81.040	71.920	41.430	19.690
16	20.780	4.000	4.210	12.510	20.660	39.670	58.230	77.230	81.210	70.670	40.860	18.580
17	20.750	4.010	7.790	11.320	21.150	40.440	59.400	77.500	81.760	69.430	40.300	18.160
18	20.790	4.010	8.490	9.240	21.600	41.130	60.540	77.720	82.140	68.120	39.750	18.070
19	20.820	4.020	7.210	7.740	22.000	41.940	61.610	77.890	82.440	66.890	39.200	18.070
20	20.860	4.020	4.600	7.270	22.360	42.670	62.620	78.090	82.610	65.660	38.600	18.160
21	20.900	4.010	6.830	6.910	22.710	43.380	63.540	78.220	82.750	64.440	38.010	18.260
22	20.950	4.030	11.140	6.860	23.030	44.040	64.600	78.340	82.870	63.230	37.420	18.400
23	21.000	4.020	12.090	7.220	23.330	44.650	65.660	78.480	82.950	62.350	36.840	18.770
24	21.030	4.010	12.800	7.770	23.640	45.250	66.580	78.940	83.030	61.690	36.330	19.630
25	20.520	4.050	11.810	8.380	24.090	45.860	67.440	79.410	83.190	60.920	35.820	20.230
26	19.820	4.240	9.720	8.960	24.570	46.400	68.330	79.750	83.420	60.010	35.210	20.480
27	19.420	4.110	8.500	9.510	25.120	46.950	69.120	80.030	83.560	58.880	34.660	20.600
28	18.720	4.020	6.960	9.980	25.750	47.440	69.820	80.260	83.670	57.690	34.110	20.670
29	18.030	4.010	4.910	10.480	------	47.900	70.410	80.420	83.690	56.510	33.580	20.710
30	17.310	4.010	4.020	11.170	------	48.460	70.930	80.360	83.600	55.280	32.890	20.730
31	16.590	------	4.000	11.870	------	49.140	------	80.450	------	54.150	32.360	------
MAX	22.900	16.030	12.800	14.300	25.750	49.140	70.930	80.450	83.690	83.520	53.060	31.750
MIN	16.590	4.000	3.980	3.980	12.470	26.960	49.760	71.400	80.520	54.150	32.360	18.070
(†)	1,241.41	1,180.30	1,180.21	1,223.58	1,267.49	1,308.95	1,336.82	1,347.46	1,350.83	1,315.90	1,281.6	1,254.36
(‡)	-6,920	-12,580	-10	+7,870	+13,880	+23,390	+21,790	+9,520	+3,150	-29,450	-21,790	-11,630

CAL YR 1972 MAX 84.870 MIN 3.930 AC-FT‡ +60
WTR YR 1973 MAX 83.690 MIN 3.980 AC-FT‡ -2,780

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14162200 BLUE RIVER AT BLUE RIVER, OREG.

LOCATION.--Lat 44°09'45", long 122°19'55", in NW¼SE¼ sec.21, T.16 S., R.4 E., Lane County, on right bank 0.3 mi (0.5 km) upstream from Simmonds Creek, 0.7 mi (1.1 km) north of town of Blue River, 0.8 mi (1.3 km) downstream from Blue River Dam, and at mile 0.9 (1.4 km).

DRAINAGE AREA.--87.7 mi^2 (227.1 km^2).

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,056.53 ft (322.030 m) above mean sea level (Corps of Engineers bench mark). Prior to Aug. 25, 1966, nonrecording gage at datum 0.80 ft (0.244 m) higher.

AVERAGE DISCHARGE.--7 years, 476 ft^3/s (13.5 m^3/s), 344,900 acre-ft/yr (425 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,540 ft^3/s (100 m^3/s) Dec. 21, gage height, 7.88 ft (2.402 m); minimum, 12 ft^3/s (0.34 m^3/s) Oct. 17-25.

Period of record: Maximum discharge, 7,270 ft^3/s (206 m^3/s) Feb. 23, 1968, gage height, 8.93 ft (2.722 m); minimum, 0.80 ft^3/s (0.023 m^3/s) Oct. 8, 10, 11, 1968; minimum daily, 3.7 ft^3/s (0.10 m^3/s) Oct. 8, 1968.

REMARKS.--Records excellent. Flow regulated since 1968 by Blue River Lake (see station 14162100). No diversion above station. Discharge not adjusted for storage or release from Blue River Lake as losses from reservoir at times exceed natural flow. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	425	142	457	50	57	51	24	59	131	571	293
2	159	508	151	465	49	57	51	24	59	131	571	293
3	96	798	200	409	48	57	51	24	59	166	566	290
4	103	882	170	346	48	57	51	24	59	269	562	290
5	107	822	132	323	48	57	50	24	59	353	575	296
6	107	705	129	275	48	57	50	24	59	388	575	299
7	107	635	124	240	48	57	50	24	59	465	539	299
8	107	607	76	225	49	55	50	24	59	494	429	477
9	107	593	87	215	48	54	40	24	60	494	398	575
10	107	705	102	208	49	57	23	24	60	494	360	575
11	107	670	87	305	49	57	23	24	60	526	299	566
12	107	593	99	990	50	56	23	24	60	539	299	575
13	107	453	93	1.310	50	57	23	24	60	584	296	571
14	107	178	73	1.010	49	57	23	24	60	625	296	566
15	107	281	73	1.890	49	56	23	24	60	625	296	635
16	107	159	112	1.850	49	56	24	25	60	625	293	670
17	43	90	690	1.830	50	56	25	25	61	625	293	243
18	12	100	1.750	1.830	51	54	26	25	61	625	290	48
19	12	105	2.990	1.350	51	53	28	25	61	625	290	48
20	12	105	2.990	792	50	52	26	25	61	625	305	48
21	12	97	2.080	660	50	52	25	46	61	625	302	48
22	12	88	1.080	469	56	52	25	60	61	625	302	49
23	12	90	1.970	266	57	51	25	60	61	465	299	50
24	12	85	2.020	215	54	51	24	61	61	353	299	51
25	290	91	2.000	220	53	51	24	40	61	402	296	51
26	402	296	1.940	161	54	51	24	29	61	499	296	50
27	240	311	1.890	119	54	52	24	29	61	598	296	50
28	433	235	1.860	120	55	52	24	29	61	625	296	50
29	429	187	1.640	85	------	51	24	53	102	625	296	50
30	425	161	978	48	------	50	24	134	131	620	296	50
31	425	------	553	52	------	51	------	59	------	593	296	------
TOTAL	4.752	11.055	28.281	18.735	1.416	1.683	954	1.085	1.917	15.439	11.377	8.156
MEAN	153	369	912	604	50.6	54.3	31.8	35.0	63.9	498	367	272
MAX	433	882	2.990	1.890	57	57	51	134	131	625	575	670
MIN	12	85	73	48	48	50	23	24	59	131	290	48
AC-FT	9.430	21.930	56.100	37.160	2.810	3.340	1.890	2.150	3.800	30.620	22.570	16.180

CAL YR 1972 TOTAL 240.094 MEAN 656 MAX 3.590 MIN 12 AC-FT 476.200
WTR YR 1973 TOTAL 104.850 MEAN 287 MAX 2.990 MIN 12 AC-FT 208.000

14162500 MCKENZIE RIVER NEAR VIDA, OREG.

LOCATION.--Lat 44°07'30", long 122°28'10", in NE¼NE¼ sec.5, T.17 S., R.3 E., Lane County, on right bank 0.4 mi (0.6 km) downstream from Mason Creek, 5.4 mi (8.7 km) east of Vida, and at mile 47.7 (76.6 km).

DRAINAGE AREA.--930 mi^2 (2,409 km^2) at cableway 0.4 mi (0.6 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--July 1910 to March 1911 (published as "at Martins Rapids, near Vida"), September 1924 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 855.71 ft (260.820 m) above mean sea level (levels by Eugene Water and Electric Board). July 1, 1910, to Mar. 31, 1911, nonrecording gage at site 3 mi (5 km) downstream at different datum. Spet. 1, 1924, to Nov. 16, 1928, nonrecording gage at site 20 ft (6 m) upstream at datum 0.15 ft (0.046 m) lower. Nov. 17, 1928, to Sept. 23, 1968, water-stage recorder at present site on left bank at datum 0.15 ft (0.046 m) lower.

AVERAGE DISCHARGE.--49 years (1924-73), 4,026 ft^3/s (114 m^3/s), 2,917,000 acre-ft/yr (3.60 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,400 ft^3/s (351 m^3/s) Dec. 22, gage height, 5.40 ft (1.646 m); minimum, 1,930 ft^3/s (54.7 m^3/s) Aug. 10-12, 16.

Period of record: Maximum discharge, 64,400 ft^3/s (1,820 m^3/s) Dec. 28, 1945, gage height, 17.70 ft (5.395 m), site and datum then in use, from rating curve extended above 32,000 ft^3/s (906 m^3/s); minimum, 1,260 ft^3/s (35.7 m^3/s) Nov. 7, 1930, Sept. 17, Oct. 4, 8, 9, 1931.

Flood in January 1923 reached a stage of 17.2 ft (5.24 m), from floodmarks, discharge, 62,000 ft^3/s (1,760 m^3/s).

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Flow regulated since 1963 by Smith River Reservoir (see sta 14158795) and Cougar Lake (see sta 14159400), and since 1968 by Blue River Lake (see sta 14162100). No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report. All records given herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 1124: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,100	3,250	2,340	5,660	3,000	2,600	2,680	2,510	2,330	2,190	2,360	2,540
2	2,810	3,720	2,600	5,300	2,890	2,800	2,620	2,440	2,140	2,160	2,330	2,530
3	2,730	3,880	3,280	4,550	2,880	2,800	2,570	2,440	2,070	2,170	2,320	2,510
4	2,720	4,420	2,980	4,020	2,930	2,600	2,480	2,530	2,060	2,270	2,300	2,480
5	2,780	4,330	3,170	3,830	2,890	2,600	2,470	2,540	2,110	2,350	2,310	2,500
6	2,800	3,950	3,180	3,730	2,970	2,600	2,540	2,480	2,210	2,390	2,330	2,540
7	2,820	3,770	3,150	3,450	2,750	2,400	2,540	2,460	2,210	2,430	2,280	2,690
8	2,810	3,430	2,870	3,310	2,650	2,400	2,490	2,540	2,200	2,470	2,210	2,710
9	2,770	3,650	2,330	3,350	2,670	2,600	2,470	2,530	2,170	2,500	2,180	2,840
10	2,870	4,030	2,490	3,400	2,670	3,000	2,330	2,430	2,120	2,480	2,060	2,840
11	3,000	3,980	3,020	3,930	2,650	3,000	2,320	2,370	2,100	2,470	1,930	2,900
12	2,800	3,660	2,730	6,150	2,590	2,800	2,380	2,330	2,100	2,470	1,980	2,860
13	2,910	3,600	2,130	9,010	2,530	2,800	2,590	2,370	2,160	2,500	2,020	2,830
14	2,890	3,180	1,970	7,360	2,490	2,800	2,500	2,450	2,170	2,600	2,010	2,820
15	2,770	3,230	1,980	7,550	2,440	2,600	2,460	2,500	2,160	2,570	1,990	2,820
16	2,810	3,140	2,200	9,130	2,400	2,600	2,630	2,510	2,230	2,510	2,170	2,640
17	2,770	3,060	5,130	10,800	2,470	2,800	3,340	2,460	2,700	2,500	2,480	2,540
18	2,720	3,050	6,720	9,600	2,470	2,800	3,170	2,430	2,540	2,540	2,490	2,280
19	2,700	3,050	9,310	7,220	2,430	2,800	3,270	2,350	2,260	2,540	2,540	2,330
20	2,680	3,010	10,200	5,490	2,400	2,600	3,050	2,230	2,160	2,550	2,550	2,490
21	2,700	2,500	10,300	5,230	2,350	2,600	2,910	2,280	2,100	2,530	2,550	2,430
22	2,720	2,320	9,800	4,780	2,320	2,600	2,980	2,430	2,070	2,480	2,530	2,480
23	2,690	2,200	10,400	4,280	2,370	2,600	3,020	2,430	2,110	2,330	2,490	2,700
24	2,650	2,110	10,200	4,220	2,270	2,600	2,920	2,680	2,210	2,110	2,560	3,050
25	2,920	2,130	8,800	4,310	2,400	2,600	2,850	2,700	2,170	2,180	2,620	3,110
26	3,170	2,870	8,140	3,850	2,400	2,600	2,860	2,320	2,230	2,290	2,580	2,640
27	2,930	2,840	9,280	3,330	2,400	2,600	2,910	2,190	2,090	2,370	2,560	2,500
28	3,250	2,610	9,660	3,300	2,400	2,600	2,870	2,100	2,010	2,420	2,540	2,500
29	3,260	2,500	8,520	3,140	------	2,500	2,780	2,070	2,020	2,430	2,500	2,480
30	3,180	2,440	6,880	3,110	------	2,490	2,680	2,630	2,200	2,430	2,510	2,400
31	3,110	------	6,040	3,110	------	2,680	------	2,330	------	2,390	2,540	------
TOTAL	88,840	95,810	171,800	159,500	72,080	82,470	81,680	75,060	65,410	74,620	72,820	78,980
MEAN	2,866	3,194	5,542	5,145	2,574	2,660	2,723	2,421	2,180	2,407	2,349	2,633
MAX	3,260	4,420	10,400	10,800	3,000	3,000	3,340	2,700	2,700	2,600	2,620	3,110
MIN	2,650	2,110	1,970	3,110	2,270	2,400	2,320	2,070	2,010	2,110	1,930	2,280
AC-FT	176,200	190,000	340,800	316,400	143,000	163,600	162,000	148,900	129,700	148,000	144,400	156,700

CAL YR 1972 TOTAL 1,983,380 MEAN 5,419 MAX 23,000 MIN 1,970 AC-FT 3,934,000
WTR YR 1973 TOTAL 1,119,070 MEAN 3,066 MAX 10,800 MIN 1,930 AC-FT 2,220,000

NOTE.--No gage-height record Dec. 21, Feb. 25 to Mar. 28.

14163000 GATE CREEK AT VIDA, OREG.

LOCATION.--Lat 44°08'45", long 122°34'15", in SW¼ sec.28, T.16 S., R.2 E., Lane County, on right bank 300 ft (91 m) downstream from bridge on U.S. Highway 126, at Vida, and at mile 0.2 (0.3 km).

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--June 1951 to September 1957; annual maximums, water years 1958-65; August 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 764.56 ft (233.038 m) above mean sea level. June 11, 1951, to Sept. 30, 1957, water-stage recorder, and Oct. 1, 1957, to Aug. 1, 1966, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--13 years (1951-57, 1966-73), 223 ft³/s (6.32 m³/s), 63.62 in/yr (1,616 mm/yr), 161,600 acre-ft/yr (199 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) Jan. 13, gage height, 5.50 ft (1.676 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 16, 17.

Period of record: Maximum discharge, 7,140 ft³/s (202 m³/s) Dec. 22, 1964, gage height, 12.18 ft (3.712 m), from slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) Nov. 26, 27, 1952.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	49	61	247	203	227	229	111	50	39	22	19
2	22	129	72	276	187	256	229	103	49	38	22	18
3	22	91	101	251	174	212	212	99	48	37	22	18
4	22	139	82	216	176	203	196	99	48	36	22	18
5	21	139	70	196	181	192	185	93	45	35	21	17
6	20	93	66	176	183	196	168	89	44	35	21	17
7	20	72	57	157	165	181	153	87	43	34	21	25
8	20	94	55	143	153	163	143	98	42	33	21	22
9	20	79	55	135	145	159	135	89	41	32	21	20
10	25	121	55	131	153	361	127	84	41	32	21	19
11	30	91	50	192	151	305	119	79	40	31	21	17
12	24	67	50	645	145	249	115	74	43	30	20	17
13	29	59	48	1.090	135	249	113	70	43	30	20	17
14	27	51	46	703	129	242	105	66	42	30	20	17
15	23	45	46	470	121	223	99	64	46	29	19	16
16	22	42	55	627	115	220	143	61	66	28	19	16
17	21	39	837	522	125	223	227	59	149	27	20	16
18	21	44	654	403	123	209	254	57	111	27	19	20
19	20	53	645	321	115	234	310	56	72	27	19	26
20	20	46	610	281	109	236	291	54	57	28	19	38
21	20	46	815	273	103	229	254	53	51	29	19	45
22	21	44	685	245	101	216	240	52	48	27	18	41
23	20	42	658	225	98	205	216	56	45	27	19	103
24	20	39	916	236	96	192	190	101	43	26	30	198
25	20	45	751	266	111	183	170	101	52	25	30	155
26	22	194	459	227	103	168	157	70	72	25	22	70
27	22	129	544	203	103	165	143	61	53	25	21	48
28	36	96	561	185	109	161	133	57	46	24	20	38
29	42	81	411	183	------	151	125	53	43	24	20	34
30	34	69	321	209	------	179	119	52	41	23	20	31
31	28	------	286	227	------	247	------	50	------	22	19	------
TOTAL	737	2.328	10.122	9.661	3.812	6.638	5.300	2.298	1.614	915	648	1.156
MEAN	23.8	77.6	327	312	136	214	177	74.1	53.8	29.5	20.9	38.5
MAX	42	194	916	1.090	203	361	310	111	149	39	30	198
MIN	20	39	46	131	96	151	99	50	40	22	18	16
CFSM	.50	1.63	6.87	6.55	2.86	4.50	3.72	1.56	1.13	.62	.44	.81
IN.	.58	1.82	7.91	7.55	2.98	5.19	4.14	1.80	1.26	.72	.51	.90
AC-FT	1.460	4.620	20.080	19.160	7.560	13.170	10.510	4.560	3.200	1.810	1.290	2.290

CAL YR 1972 TOTAL 96.803 MEAN 264 MAX 3.170 MIN 17 CFSM 5.55 IN 75.65 AC-FT 192.000

WTR YR 1973 TOTAL 45.229 MEAN 124 MAX 1.090 MIN 16 CFSM 2.61 IN 35.35 AC-FT 89.710

PEAK DISCHARGE (BASE, 1,800 CFS).--No peak above base.

14165000 MOHAWK RIVER NEAR SPRINGFIELD, OREG.

LOCATION.--Lat 44°05'34", long 122°57'20", in SE¼NW¼ sec.17, T.17 S., R.2 W., Lane County, on left bank 50 ft (15 m) downstream from bridge, 1.3 mi (2.1 km) northeast of Springfield, and at mile 1.59 (2.56 km).

DRAINAGE AREA.--177 mi^2 (458 km^2).

PERIOD OF RECORD.--September 1935 to September 1952, October 1963 to current year. Prior to October 1935 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 442.47 ft (134.865 m) above mean sea level. Oct. 1, 1935, to Sept. 30, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--27 years, 547 ft^3/s (15.5 m^3/s), 41.97 in/yr (1,066 mm/yr), 396,300 acre-ft/yr (489 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,890 ft^3/s (81.8 m^3/s) Dec. 24, gage height, 9.38 ft (2.859 m); minimum, 11 ft^3/s (0.31 m^3/s) Aug. 16.

Period of record: Maximum discharge, 13,000 ft^3/s (368 m^3/s) Dec. 22, 1964, gage height, 22.60 ft (6.888 m); minimum, 8.2 ft^3/s (0.23 m^3/s) Sept. 9, 1967.

Flood of Dec. 22, 1955, reached a stage of 22.9 ft (6.98 m), from floodmark, probably affected by backwater from McKenzie River, discharge, 9,200 ft^3/s (261 m^3/s).

REMARKS.--Records good. Slight regulation at low flows by log ponds upstream. Many diversions for irrigation above station. Stage affected at times by backwater from McKenzie River.

REVISIONS (WATER YEARS).--WSP 1248: 1439. WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	44	137	795	564	484	679	253	101	60	17	17
2	34	120	133	787	533	593	647	239	100	56	16	17
3	34	152	183	722	505	557	588	234	98	53	16	17
4	33	215	163	649	481	541	544	239	94	50	16	16
5	33	172	146	601	463	492	507	224	89	47	16	15
6	32	121	146	559	442	505	466	212	85	47	17	16
7	31	129	129	505	408	460	429	210	82	47	17	30
8	31	199	110	463	380	424	401	215	78	45	17	36
9	30	152	110	437	364	406	375	210	80	40	16	25
10	35	231	100	416	385	655	349	196	76	40	18	22
11	51	199	100	559	375	663	328	181	74	41	18	20
12	42	144	114	1.110	367	585	312	170	74	38	17	18
13	39	123	108	2.250	349	585	323	164	89	35	15	18
14	41	108	99	1.880	328	554	294	156	78	31	14	18
15	37	95	93	1.380	317	512	277	148	82	29	14	19
16	35	87	144	1.680	302	505	312	140	91	27	13	19
17	33	82	1.400	1.700	323	546	419	134	168	27	16	18
18	33	85	1.460	1.410	323	520	481	128	150	26	18	21
19	33	133	1.580	1.170	302	692	583	128	109	25	17	28
20	33	135	1.540	944	287	779	562	126	92	28	16	62
21	33	121	2.160	903	277	752	499	124	78	34	15	56
22	35	125	1.880	806	270	679	460	120	71	35	16	71
23	35	114	1.900	730	256	614	427	126	74	32	17	78
24	35	110	2.680	752	251	567	390	203	71	29	21	130
25	34	102	2.100	776	372	525	359	193	78	26	45	120
26	35	156	1.420	692	338	486	333	150	120	24	29	71
27	38	185	1.930	638	377	489	310	132	92	23	24	51
28	46	165	1.960	593	349	531	289	126	78	21	21	43
29	87	167	1.470	567	------	476	277	118	67	21	18	38
30	59	148	1.140	593	------	515	265	107	65	18	18	35
31	47	------	935	628	------	636	------	103	------	17	17	------
TOTAL	1.189	4.119	27.570	27.695	10.288	17.328	12.485	5.209	2.684	1.072	565	1.145
MEAN	38.4	137	889	893	367	559	416	168	89.5	34.6	18.2	38.2
MAX	87	231	2.680	2.250	564	779	679	253	168	60	45	130
MIN	30	44	93	416	251	406	265	103	65	17	13	15
CFSM	.22	.77	5.02	5.05	2.07	3.16	2.35	.95	.51	.20	.10	.22
IN.	.25	.87	5.79	5.82	2.16	3.64	2.62	1.09	.56	.23	.12	.24
AC-FT	2.360	8.170	54.690	54.930	20.410	34.370	24.760	10.330	5.320	2.130	1.120	2.270

CAL YR 1972 TOTAL 251.859 MEAN 688 MAX 10.000 MIN 20 CFSM 3.89 IN 52.93 AC-FT 499.600
WTR YR 1973 TOTAL 111.349 MEAN 305 MAX 2.680 MIN 13 CFSM 1.72 IN 23.40 AC-FT 220.900

PEAK DISCHARGE (BASE, 3,500 CFS).--No peak above base.

14166000 WILLAMETTE RIVER AT HARRISBURG, OREG.

LOCATION.--Lat 44°16'14", long 123°10'21", in NW¼NE¼ sec.16, T.15 S., R.4 W., Linn County, on right bank 75 ft (23 m) north of intersection of First Street and Kesling Street in Harrisburg and at mile 161.0 (259.0 km).

DRAINAGE AREA.--3,420 mi² (8,860 km²), approximately.

PERIOD OF RECORD.--October 1944 to current year. Gage-height records collected at same site in 1927-28, 1931, 1934, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 288.39 ft (87.901 m) above mean sea level. Oct. 1 to Nov. 14, 1944, nonrecording gage at bridge 1,110 ft (338 m) upstream at different datum. Nov. 15, 1944, to Aug. 15, 1973, at site 1,100 ft (335 m) upstream at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--29 years, 12,470 ft³/s (353 m³/s), 9,035,000 acre-ft/yr (11.1 km³/yr).

EXTREMES.--Current year: Maximum discharge, 34,400 ft³/s (974 m³/s) Jan. 17, gage height, 7.87 ft (2.399 m); minimum, 3,340 ft³/s (94.6 m³/s) May 30.

Period of record: Maximum discharge, 210,000 ft³/s (5,950 m³/s) Dec. 29, 1945, gage height, 19.69 ft (6.002 m), from rating curve extended above 115,000 ft³/s (3,260 m³/s); minimum, 1,990 ft³/s (56.4 m³/s) Oct. 30, 1944.

Flood stage of 20.5 ft (6.25 m) was reached in December 1861, and 20.1 ft (6.13 m) in February 1890 (information from Corps of Engineers). Flood of Jan. 1, 1943, reached a stage of 19.1 ft (5.82 m) from National Weather Service.

REMARKS.--Records good. Flow regulated by 8 reservoirs above station (see elsewhere in this report). Many small diversions above station for irrigation. Records of chemical analyses and water temperatures at site 1,100 ft (335 m) upstream on left bank for the current year are published in Part 2 of this report.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.810	8.170	7.780	17.000	8.700	6.980	9.550	5.020	3.640	3.650	4.250	4.900
2	7.330	9.550	7.550	16.200	8.130	8.400	9.530	4.860	3.840	3.780	4.190	4.900
3	6.540	8.660	8.420	13.700	7.930	7.960	9.270	4.770	3.760	3.760	4.150	4.870
4	6.030	9.830	9.040	12.600	7.800	7.820	8.500	4.820	3.700	3.770	4.160	4.830
5	5.900	10.900	9.370	11.700	7.880	7.440	7.890	4.820	3.700	3.820	4.290	4.810
6	6.070	10.400	9.800	11.000	7.950	7.320	7.760	4.630	3.780	3.880	4.430	4.920
7	6.060	10.400	9.590	9.940	7.780	7.150	7.370	4.520	3.720	3.890	4.520	4.940
8	5.970	10.300	9.130	9.010	7.250	6.800	6.880	4.460	3.800	3.970	4.450	4.750
9	5.960	9.530	7.200	9.090	6.850	6.560	6.480	4.600	3.800	4.010	4.380	4.690
10	6.110	10.300	6.060	9.180	6.750	7.600	5.770	4.380	3.800	3.970	4.390	4.670
11	6.450	10.800	6.730	9.730	6.730	10.300	4.990	4.240	3.800	3.950	4.190	4.580
12	6.640	10.100	8.440	12.600	6.630	9.070	5.200	4.200	3.600	3.950	4.200	4.480
13	6.370	9.830	7.430	26.500	6.380	8.640	5.330	4.200	3.600	3.970	4.260	4.630
14	6.640	9.550	5.270	21.700	6.150	8.420	5.450	4.000	3.600	4.050	4.300	4.650
15	6.510	9.250	4.360	23.600	6.030	7.980	5.190	4.030	3.800	4.090	4.290	4.670
16	6.340	8.960	4.630	25.400	5.800	7.660	4.990	4.090	3.770	4.080	4.540	4.580
17	6.340	8.200	11.300	33.100	5.830	8.290	6.260	3.990	4.430	4.150	5.210	4.650
18	6.260	8.030	20.000	32.100	6.100	8.060	7.920	3.900	5.150	4.380	5.300	4.820
19	6.170	8.230	25.600	29.400	5.930	8.960	9.330	3.900	4.340	4.390	5.350	4.900
20	6.240	8.300	30.300	21.300	5.780	10.600	9.330	3.820	3.880	4.420	5.360	5.110
21	7.510	8.100	30.000	17.600	5.600	9.900	9.360	3.710	3.720	4.430	5.390	5.180
22	7.500	7.580	27.200	16.600	5.450	9.860	8.520	3.780	3.600	4.490	5.410	5.200
23	7.430	7.300	31.100	14.700	5.390	9.530	8.260	3.830	3.600	4.440	5.390	5.370
24	7.440	7.030	32.100	13.500	5.350	8.700	7.770	4.170	3.800	4.100	5.250	5.890
25	7.770	6.880	30.700	13.600	5.740	8.230	6.840	4.730	3.800	4.050	5.030	6.580
26	8.010	7.200	25.500	13.100	5.800	7.910	6.320	4.170	3.800	4.140	4.960	5.850
27	8.320	8.410	26.200	10.900	6.150	7.610	5.980	3.820	3.600	4.200	4.870	5.340
28	8.450	8.550	33.400	9.430	6.020	7.750	5.670	3.660	3.620	4.290	4.840	5.280
29	8.600	8.390	30.800	8.950	------	7.380	5.360	3.600	3.580	4.330	4.890	5.370
30	8.360	8.110	23.600	8.580	------	7.160	5.140	4.000	3.640	4.320	4.920	5.180
31	8.450	------	19.700	8.920	------	8.260	------	3.700	------	4.300	5.240	------
TOTAL	216.580	266.840	518.300	490.730	183.880	254.300	212.210	130.420	114.270	127.020	146.400	150.590
MEAN	6.986	8.895	16.720	15.830	6.567	8.203	7.074	4.207	3.809	4.097	4.723	5.020
MAX	8.810	10.900	33.400	33.100	8.700	10.600	9.550	5.020	5.150	4.490	5.410	6.580
MIN	5.900	6.880	4.360	8.580	5.350	6.560	4.990	3.600	3.580	3.650	4.150	4.480
AC-FT	429.600	529.300	1.028M	973.400	364.700	504.400	420.900	258.700	226.700	251.900	290.400	298.700

CAL YR 1972 TOTAL 5.682.280 MEAN 15.530 MAX 71.800 MIN 4.360 AC-FT 11.270.000
WTR YR 1973 TOTAL 2.811.540 MEAN 7.703 MAX 33.400 MIN 3.580 AC-FT 5.577.000

14166500 LONG TOM RIVER NEAR NOTI, OREG.

LOCATION.--Lat 44°03'00", long 123°25'30", in sec.33, T.17 S., R.6 W., Lane County, on left bank 0.2 mi (0.3 km) upstream from Southern Pacific Railroad bridge, 0.8 mi (1.3 km) downstream from Noti Creek, 1.3 mi (2.1 km) southeast of Noti, and at mile 37.4 (60.2 km).

DRAINAGE AREA.--89.3 mi^2 (231.3 km^2).

PERIOD OF RECORD.--October 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 389.05 ft (118.582 m) above mean sea level (levels by U.S. Weather Bureau). Prior to Nov. 6, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 238 ft^3/s (6.74 m^3/s), 36.19 in/yr (919 mm/yr), 172,400 acre-ft/yr (213 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,620 ft^3/s (45.9 m^3/s) Dec. 22, gage height, 11.73 ft (3.575 m); minimum, 2.0 ft^3/s (0.057 m^3/s) Aug. 7.
Period of record: Maximum discharge, 6,990 ft^3/s (198 m^3/s) Dec. 22, 1955, gage height, 20.17 ft (6.148 m); minimum, 2.0 ft^3/s (0.057 m^3/s) Aug. 7, 1973.

REMARKS.--Records good. Slight regulation caused by logpond above Noti. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1318: 1936(M). WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	29	48	270	274	260	327	95	44	24	3.7	7.5
2	20	36	52	244	254	364	299	93	43	22	3.3	6.7
3	20	52	79	219	243	316	256	91	42	19	3.4	6.0
4	19	100	71	197	224	290	229	98	41	18	3.1	5.0
5	18	80	63	184	199	252	209	99	38	17	3.4	3.6
6	18	51	56	171	196	241	193	86	36	15	3.0	3.1
7	17	48	51	150	185	220	178	86	35	15	2.5	5.5
8	17	49	49	136	173	196	168	91	35	15	2.8	8.9
9	17	55	41	122	164	182	163	87	35	15	3.4	8.9
10	24	117	38	124	165	220	155	84	34	12	3.2	7.5
11	29	75	37	218	155	229	147	79	33	11	3.3	5.4
12	25	57	43	688	161	209	138	78	33	10	3.4	5.3
13	22	46	41	1,260	153	206	146	70	36	9.4	3.5	4.7
14	23	43	42	1,120	144	189	138	67	34	8.6	3.3	5.6
15	24	41	37	678	139	178	129	64	33	8.0	3.0	7.5
16	21	37	48	662	131	177	130	61	35	6.9	3.1	7.4
17	20	34	349	696	131	188	162	59	66	6.7	3.3	6.8
18	21	37	524	587	131	184	173	57	58	6.5	3.1	7.6
19	21	116	862	535	122	277	188	56	41	7.4	3.6	12
20	20	92	634	454	119	346	165	54	35	8.4	3.7	21
21	20	75	1,070	409	117	340	142	59	32	9.3	3.2	27
22	21	70	1,380	360	114	315	134	59	30	9.5	2.9	28
23	21	61	1,070	320	110	270	134	57	31	9.1	3.1	32
24	20	57	923	354	110	247	128	72	30	8.5	5.2	41
25	20	51	858	403	201	223	122	66	33	7.3	11	45
26	20	59	566	345	216	205	109	59	40	6.9	11	27
27	21	64	597	312	249	205	109	54	33	6.4	9.2	19
28	27	64	643	279	237	210	103	54	28	5.9	7.7	17
29	37	56	500	262	------	189	101	61	24	5.1	7.1	15
30	29	49	387	271	------	191	98	48	24	4.2	7.1	14
31	26	------	322	316	------	243	------	45	------	3.5	7.1	------
TOTAL	679	1,801	11,481	12,346	4,817	7,362	4,873	2,189	1,092	330.6	139.7	411.0
MEAN	21.9	60.0	370	398	172	237	162	70.6	36.4	10.7	4.51	13.7
MAX	37	117	1,380	1,260	274	364	327	99	66	24	11	45
MIN	17	29	37	122	110	177	98	45	24	3.5	2.5	3.1
CFSM	.25	.67	4.14	4.46	1.93	2.65	1.81	.79	.41	.12	.05	.15
IN.	.28	.75	4.78	5.14	2.01	3.07	2.03	.91	.45	.14	.06	.17
AC-FT	1,350	3,570	22,770	24,490	9,550	14,600	9,670	4,340	2,170	656	277	815

CAL YR 1972 TOTAL 99,844.5 MEAN 273 MAX 4,950 MIN 6.9 CFSM 3.06 IN 41.59 AC-FT 198,000
WTR YR 1973 TOTAL 47,521.3 MEAN 130 MAX 1,380 MIN 2.5 CFSM 1.46 IN 19.80 AC-FT 94,260

PEAK DISCHARGE (BASE, 1,600 CFS).--Dec. 22 (2030) 1,620 cfs (11.73 ft).

14167000 COYOTE CREEK NEAR CROW, OREG.

LOCATION.--Lat 44°01'19", long 123°15'17", in SW¼NE¼ sec.11, T.18 S., R.5 W., Lane County, on right bank 1.0 mi (1.6 km) downstream from Spencer Creek, 4.3 mi (6.9 km) northeast of Crow, and at mile 3.8 (6.1 km).

DRAINAGE AREA.--95.1 mi² (246.3 km²).

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 374.0 ft (114.00 m) above mean sea level (Corps of Engineers bench mark). Prior to Aug. 31, 1940, nonrecording gage near same site at different datums.

AVERAGE DISCHARGE.--33 years, 183 ft³/s (5.18 m³/s), 26.13 in/yr (66 mm/yr), 132,600 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 984 ft³/s (27.9 m³/s) Jan. 13, gage height, 9.08 ft (2.768 m); no flow July 15 to Sept. 24.

Period of record: Maximum discharge, 10,600 ft³/s (300 m³/s) Feb. 10, 1961, gage height, 14.43 ft (4.398 m), from rating curve extended above 4,700 ft³/s (133 m³/s); no flow at times most years.

REMARKS.--Records good. No regulation. Several small diversions for irrigation above station.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.7	5.9	149	191	245	228	30	7.9	1.3		0
2	.81	2.6	5.8	152	168	285	202	28	7.4	.92		0
3	.75	4.4	15	137	150	246	167	27	6.9	.46		0
4	.66	10	18	119	143	239	143	31	2.6	.15		0
5	.59	12	15	104	137	203	125	33	4.0	.17		0
6	.90	12	12	97	138	206	107	28	4.6	.06		0
7	.71	6.9	9.5	83	116	172	94	26	4.6	.04		0
8	.69	5.7	7.9	73	101	142	85	25	4.0	.02		0
9	2.7	6.2	5.7	72	95	126	79	24	3.5	.01		0
10	1.2	7.5	5.1	72	98	170	71	22	3.0	.01		0
11	.73	7.8	4.3	137	100	175	65	21	2.8	.03		0
12	.73	7.8	4.0	355	101	140	58	20	3.0	.04		0
13	1.5	6.8	4.6	816	91	139	65	11	2.8	.03		0
14	2.4	6.1	4.9	772	84	131	61	10	3.2	.01		0
15	1.8	4.6	4.7	517	82	110	50	15	3.7	0		0
16	1.5	4.1	6.2	629	75	104	47	14	3.5	0		0
17	8.2	3.7	133	617	72	124	67	13	4.6	0		0
18	2.2	3.5	267	471	73	108	82	12	6.0	0		0
19	1.5	5.1	315	511	67	355	88	10	6.0	0		0
20	1.3	12	328	385	61	416	89	9.8	4.3	0		0
21	1.9	13	541	325	55	333	73	9.6	3.0	0		0
22	1.7	13	673	253	53	254	63	9.3	2.8	0		0
23	1.4	13	622	208	49	199	55	9.7	2.6	0		0
24	1.2	10	788	243	48	170	49	10	2.4	0		0
25	1.0	8.1	593	309	175	146	45	12	1.5	0		.67
26	1.4	7.0	339	254	178	128	41	12	1.4	0		1.2
27	1.4	6.9	407	212	185	125	38	12	2.4	0		.92
28	1.9	7.9	467	185	160	133	35	10	4.0	0		.79
29	1.5	7.1	327	165	------	105	33	10	3.0	0		.56
30	1.8	6.3	237	181	------	107	32	9.1	1.9	0		.41
31	3.0	------	191	261	------	145	------	7.9	------	0		------
TOTAL	49.97	223.8	6,356.6	8,864	3,046	5,681	2,437	521.4	113.4	3.25	0	4.55
MEAN	1.61	7.46	205	286	109	183	81.2	16.8	3.78	.10	0	.15
MAX	8.2	13	788	816	191	416	228	33	7.9	1.3	0	1.2
MIN	.59	2.6	4.0	72	48	104	32	7.9	1.4	0	0	0
CFSM	.02	.08	2.16	3.01	1.15	1.92	.85	.18	.04	.001	0	.002
IN.	.02	.09	2.49	3.47	1.19	2.22	.95	.20	.04	.001	0	.001
AC-FT	99	444	12,610	17,580	6,040	11,270	4,830	1,030	225	6.4	0	9.0

CAL YR 1972 TOTAL 68,526.44 MEAN 187 MAX 5,240 MIN 0 CFSM 1.97 IN 26.81 AC-FT 135,900
WTR YR 1973 TOTAL 27,300.97 MEAN 74.8 MAX 816 MIN 0 CFSM .79 IN 10.68 AC-FT 54,150

PEAK DISCHARGE (BASE, 1,600 CFS).--No peak above base.

14168000 FERN RIDGE LAKE NEAR ELMIRA, OREG.

LOCATION.--Lat 44°07'15", long 123°18'00", near center of sec.4, T.17 S., R.5 W., Lane County, in control house at spillway section of dam across Long Tom River and Coyote Creek, 4.5 mi (7.2 km) northeast of Elmira, and at mile 25.7 (41.4 km).

DRAINAGE AREA.--252 mi² (653 km²), not including Amazon Creek basin (see REMARKS).

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1971, published as Fern Ridge Reservoir near Elmira.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 93,520 acre-ft (115 hm³) May 14, 27, elevation, 372.67 ft (113.590 m); minimum, 6,970 acre-ft (8.59 hm³) Nov. 16, 17, elevation, 352.86 ft (107.552 m).
Period of record: Maximum contents, 124,500 acre-ft (154 hm³) Dec. 27, 1955, elevation, 375.83 ft (114.553 m); minimum since first filling in 1942, 163 acre-ft (0.201 hm³) Nov. 11, 1950, elevation, 344.00 ft (104.851 m).

REMARKS.--Reservoir is formed by earth-fill dam with concrete outlet and spillway, completed in 1941 by Corps of Engineers; storage began Nov. 13, 1941. Total capacity, 116,800 acre-ft (144 hm³) at elevation 375.1 ft (114.33 m), maximum pool elevation. Usable capacity, 101,100 acre-ft (125 hm³) between elevations 340.0 ft (103.63 m), sill of outlet gate, and 373.5 ft (113.84 m), normal maximum operating pool level. Reservoir used for flood control and improvement of navigation. Since November 1951, most of flow of Amazon Creek has been diverted in SE¼ sec.29, T.17 S., R.4 W., and discharged into Fern Ridge Reservoir; drainage area at point of diversion, 21.3 mi² (55.2 km²).

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

349	2,270	356	12,440	364	37,490	372	87,720
350	3,250	358	17,020	366	46,940	374	105,800
352	5,730	360	22,670	368	58,320		
354	8,760	362	29,460	370	71,900		

CONTENTS. IN ACRE-FEET. AT 2400. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81.930	31.540	7.170	7.070	20.800	40.480	76.960	91.420	93.080	89.600	81.530	73.910
2	81.770	29.980	7.480	7.230	21.420	42.480	78.200	91.500	92.990	89.430	81.290	73.980
3	81.450	28.800	7.380	7.170	22.110	44.120	79.300	91.680	92.900	89.170	81.050	73.610
4	81.130	27.190	7.250	7.320	22.980	45.610	80.170	92.030	92.730	88.910	80.730	73.460
5	81.130	25.440	7.230	7.430	23.740	46.840	80.970	92.380	92.640	88.740	80.410	73.240
6	80.810	23.680	7.360	7.310	24.550	48.140	81.530	92.460	92.380	88.570	80.250	73.240
7	80.730	21.840	7.320	7.450	25.240	49.050	82.100	92.820	92.290	88.320	79.930	73.090
8	80.650	19.930	7.230	7.560	25.920	49.860	82.500	92.820	92.030	87.980	79.620	72.860
9	79.540	18.280	7.260	7.430	26.500	50.800	83.070	92.900	91.850	87.810	79.300	72.490
10	77.730	16.440	7.320	7.560	27.090	51.860	83.400	92.900	91.590	87.550	79.060	72.560
11	75.650	14.580	7.370	8.240	27.720	53.000	83.890	93.080	91.500	87.050	78.750	72.340
12	73.610	12.680	7.460	9.730	28.360	53.810	84.130	93.260	91.330	86.800	78.590	71.970
13	71.750	10.680	7.440	11.790	28.940	54.570	84.710	93.350	91.160	86.460	78.280	71.750
14	69.720	8.530	7.380	12.870	29.500	55.400	85.130	93.350	91.070	86.380	77.970	71.460
15	67.580	7.280	7.310	13.380	29.980	56.060	85.380	93.440	91.070	86.040	77.730	71.310
16	65.640	6.970	7.960	14.650	30.390	56.720	85.960	93.440	90.980	85.960	77.500	71.020
17	63.610	6.970	8.460	15.140	30.930	57.640	86.540	93.440	91.240	85.620	77.270	71.020
18	61.630	7.280	8.810	15.210	31.420	58.320	87.220	93.440	91.160	85.210	77.110	70.950
19	59.640	7.190	8.880	15.350	31.810	60.660	87.720	93.260	91.160	84.960	76.880	70.950
20	57.090	7.140	8.350	15.000	32.160	63.020	88.570	93.170	91.160	84.790	76.420	70.950
21	54.040	7.220	7.660	14.240	32.520	65.030	88.910	93.170	90.980	84.460	76.340	70.800
22	50.960	7.170	8.930	14.200	32.800	66.470	89.260	92.990	90.810	84.220	76.030	70.950
23	47.880	7.250	10.390	14.490	33.160	67.730	89.510	93.350	90.630	83.890	75.730	71.020
24	44.760	7.260	11.480	15.210	33.800	68.720	89.770	93.440	90.550	83.720	75.800	71.020
25	42.810	7.200	11.060	16.200	34.910	69.640	90.290	93.440	90.630	83.400	75.580	70.950
26	40.990	7.220	9.580	16.820	36.160	70.440	90.370	93.440	90.630	83.150	75.420	70.870
27	39.390	7.190	8.460	17.310	37.320	71.390	90.550	93.520	90.550	82.910	75.120	70.730
28	37.490	7.200	8.010	17.570	38.550	72.270	90.720	93.440	90.290	82.740	74.890	70.660
29	36.250	7.200	7.320	17.960	------	72.940	90.980	93.440	90.030	82.420	74.820	70.510
30	34.620	7.200	7.110	18.980	------	73.830	91.160	93.260	89.770	82.180	74.660	70.290
31	33.000	------	7.100	20.160	------	75.120	------	93.170	------	81.930	74.440	------
MAX	81.930	31.540	11.480	20.160	38.550	75.120	91.160	93.520	93.080	89.600	81.530	73.980
MIN	33.000	6.970	7.100	7.070	20.800	40.480	76.960	91.420	89.770	81.930	74.440	70.290
(†)	362.92	353.02	352.95	359.16	364.24	370.43	372.40	372.63	372.24	371.30	370.34	369.78
(‡)	-49,100	-25,800	-100	+13,060	+18,390	+36,570	+16,040	+2,010	-3,400	-7,840	-7,490	-4,150

CAL YR 1972 MAX 103.900 MIN 6.970 AC-FT‡ +140
WTR YR 1973 MAX 93.520 MIN 6.970 AC-FT‡ -11,810

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14169000 LONG TOM RIVER NEAR ALVADORE, OREG.

LOCATION.--Lat 44°07'25", long 123°17'55", in SW¼NE¼ sec.4, T.17 S., R.5 W., Lane County, on left bank 0.2 mi (0.3 km) downstream from Fern Ridge Dam, 1.7 mi (2.7 km) west of Alvadore, and at mile 25.5 (41.0 km).

DRAINAGE AREA.--252 mi² (653 km²), not including Amazon Creek basin.

PERIOD OF RECORD.--August 1939 to current year. Prior to October 1943, published as "at Smithfield," and October 1943 to September 1959, as "below Fern Ridge Dam, near Smithfield."

GAGE.--Water-stage recorder and masonry control. Datum of gage is 332.00 ft (101.194 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 21, 1939, nonrecording gage and Sept. 21, 1939, to Sept. 30, 1943, water-stage recorder at site 2.5 mi (4.0 km) downstream at datum 11.09 ft (3.380 m) lower.

AVERAGE DISCHARGE.--34 years, 542 ft³/s (15.3 m³/s), 392,700 acre-ft/yr (484 hm³/yr), adjusted for diversion to Coyote Creek since 1943.

EXTREMES.--Current year: Maximum discharge, 2,510 ft³/s (71.1 m³/s) Dec. 21; minimum daily, 23 ft³/s (0.65 m³/s) May 2.
Period of record: Maximum discharge, 11,500 ft³/s (326 m³/s) Jan. 1, 1943, gage height, 15.12 ft (4.609 m), site and datum then in use; minimum daily, 2 ft³/s (0.057 m³/s) Aug. 7, 1941.

REMARKS.--Records good. Flow regulated since 1941 by Fern Ridge Lake (see station 14168000). Several small diversions for irrigation above station. Records include diversion to Coyote Creek Channel. Point of diversion is 500 ft (152 m) upstream and point of return, 2.3 mi (3.7 km) downstream. Discharge not adjusted for storage or release from Fern Ridge Lake as evaporation from reservoir at times exceeds natural flow and diversions, and beginning in November 1951, most of flow of Amazon Creek has been diverted into Fern Ridge Lake.

REVISIONS (WATER YEARS).--WSP 1248: 1940-41, 1948.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	779	78	577	333	48	46	24	37	45	56	67
2	59	785	75	520	295	50	46	23	39	43	58	67
3	58	809	137	521	183	49	46	24	38	42	58	67
4	59	908	175	394	104	50	46	24	38	42	58	67
5	58	943	107	385	83	49	46	24	38	43	58	66
6	59	936	84	391	77	50	46	24	37	43	58	67
7	59	929	98	268	63	50	48	24	37	42	58	67
8	59	930	86	245	52	51	47	24	37	43	58	68
9	555	930	45	310	53	51	47	24	37	44	58	66
10	937	944	31	233	53	50	47	24	37	46	58	66
11	954	944	31	379	53	49	47	24	38	52	60	66
12	955	937	31	987	55	49	47	24	38	54	63	66
13	942	927	59	1.820	54	50	48	25	39	54	65	66
14	961	840	78	2.070	52	50	48	25	40	54	65	66
15	967	524	78	1.510	51	50	48	26	39	54	65	66
16	955	190	79	1.480	51	50	48	26	39	55	65	66
17	943	49	574	1.530	51	50	49	25	39	55	65	68
18	953	48	1.020	1.550	51	49	50	25	37	55	65	68
19	957	134	1.410	1.420	52	52	38	24	37	54	65	66
20	1.260	169	1.830	1.340	52	51	24	25	37	55	65	67
21	1.480	158	2.280	1.340	49	52	24	24	37	55	65	67
22	1.480	137	2.270	891	50	51	24	25	39	55	65	67
23	1.470	78	2.090	569	51	50	24	25	40	55	66	67
24	1.470	88	2.180	572	50	49	24	24	41	55	66	66
25	992	101	2.190	578	49	46	24	24	44	55	66	67
26	799	101	2.120	530	50	46	24	25	45	56	66	67
27	802	93	1.940	490	51	46	24	25	45	56	67	67
28	802	78	1.760	490	49	47	24	25	43	55	67	67
29	792	78	1.440	389	-------	47	24	25	44	55	67	67
30	786	78	962	245	-------	46	24	25	45	55	67	68
31	785	-------	712	311	-------	45	-------	31	-------	55	67	-------
TOTAL	23.467	14.645	26.050	24.335	2.217	1.523	1.152	766	1.181	1.582	1.950	2.003
MEAN	757	488	840	785	79.2	49.1	38.4	24.7	39.4	51.0	62.9	66.8
MAX	1.480	944	2.280	2.070	333	52	50	31	45	56	67	68
MIN	58	48	31	233	49	45	24	23	37	42	56	66
AC-FT	46.550	29.050	51.670	48.270	4.400	3.020	2.280	1.520	2.340	3.140	3.870	3.970

CAL YR 1972 TOTAL 224.542 MEAN 614 MAX 4.100 MIN 31 AC-FT 445.400
WTR YR 1973 TOTAL 100.871 MEAN 276 MAX 2.280 MIN 23 AC-FT 200.100

14169300 AMAZON CREEK AT EUGENE, OREG.

LOCATION.--Lat 44°00'45", long 123°04'35", in SW¼SE¼ sec.8, T.18 S., R.3 W., Lane County, on right bank 145 ft (44 m) south of intersection of 39th Street and E. Amazon Drive in Eugene, and at mile 20.3 (32.7 km).

DRAINAGE AREA.--3.35 mi² (8.68 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 442.33 ft (134.822 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 4.98 ft³/s (0.141 m³/s), 20.19 in/yr (513 mm/yr), 3,610 acre-ft/yr (445 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 86 ft³/s (2.44 m³/s) Dec. 23, gage height, 4.39 ft (1.338 m); minimum, 0.07 ft³/s (0.002 m³/s) Oct. 5-8, Sept. 14, 16.
Period of record: Maximum discharge, 527 ft³/s (14.9 m³/s) Jan. 19, 1964, gage height, 7.29 ft (2.222 m); no flow at times.

REMARKS.--Records fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	1.7	.42	2.4	3.4	9.5	10	.39	.23	.15	.29	.21
2	.09	.72	4.5	4.4	2.7	5.7	5.5	.38	.21	.18	.36	.13
3	.09	4.4	2.3	5.5	2.4	6.2	3.9	.74	.22	.19	.30	.18
4	.09	2.3	.95	4.3	2.9	5.1	2.8	1.6	.25	.23	.32	.18
5	.08	.66	.66	3.6	3.3	3.8	2.3	.55	.31	.36	.29	.20
6	.08	.90	.59	2.7	2.9	5.0	1.9	.43	.29	.22	.32	1.0
7	.08	2.2	.47	2.1	2.3	3.2	1.6	.42	.25	.17	.30	.76
8	.09	.94	.34	1.6	1.9	2.5	1.4	.43	.30	.18	.28	.14
9	1.0	1.2	.31	1.6	1.7	2.3	1.2	.39	.30	.18	.35	.12
10	1.8	1.2	.26	3.4	4.2	7.4	1.1	.28	.20	.18	.24	.13
11	.33	.52	.25	5.0	2.9	4.8	.99	.31	.20	.19	.24	.15
12	.19	.36	.42	28	3.4	3.4	.93	.29	1.0	.31	.24	.13
13	.60	.43	.33	30	2.4	3.4	1.7	.30	.40	.29	.30	.11
14	.33	.29	.28	11	2.2	2.6	.86	.28	.50	.27	.25	.09
15	.15	.26	.26	7.7	1.8	2.2	.76	.26	.30	.34	.25	.11
16	.14	.37	9.3	27	1.7	3.5	1.6	.26	2.0	.41	.27	.10
17	.12	.24	24	10	2.4	3.0	2.4	.32	2.4	.33	.21	.43
18	.11	2.4	12	11	1.8	3.1	2.6	.32	.80	.25	.20	.41
19	.12	4.1	14	12	1.6	29	1.7	.26	.60	.35	.19	1.1
20	.09	.94	16	7.3	1.3	12	1.3	.24	.50	.28	.25	.41
21	.30	2.3	15	5.6	1.2	8.4	1.8	.23	.40	.21	.19	.15
22	.12	.94	26	4.1	1.1	5.1	.89	.22	.30	.26	.20	1.7
23	.09	.68	28	3.2	1.0	3.7	.76	1.2	.30	.29	.26	1.5
24	.09	.49	20	4.4	1.9	3.0	.68	1.8	.40	.23	1.2	3.0
25	.54	.41	8.1	3.5	7.0	2.4	.62	.49	2.6	.25	.25	.48
26	.20	1.4	5.8	2.7	5.7	2.0	.55	.29	1.0	.36	.18	.32
27	.16	1.0	13	2.3	4.8	4.3	.50	.26	.60	.39	.16	.19
28	1.8	1.0	9.9	2.0	4.5	2.9	.46	.26	.20	.29	.15	.19
29	.45	.59	5.3	2.2	------	2.1	.43	.25	.20	.26	.17	.21
30	.19	.48	4.0	6.4	------	5.4	.42	.25	.15	.31	.29	.13
31	.14	------	2.9	5.3	------	7.7	------	.25	------	.24	.28	------
TOTAL	9.75	35.42	225.64	222.3	76.4	163.9	52.85	13.95	17.41	8.15	8.78	13.96
MEAN	.31	1.18	7.28	7.17	2.73	5.29	1.76	.45	.58	.26	.28	.47
MAX	1.8	4.4	28	30	7.0	29	10	1.8	2.6	.41	1.2	3.0
MIN	.08	.24	.25	1.6	1.0	2.0	.42	.22	.15	.15	.15	.09
CFSM	.09	.35	2.17	2.14	.81	1.58	.53	.13	.17	.08	.08	.14
IN.	.11	.39	2.51	2.47	.85	1.82	.59	.15	.19	.09	.10	.16
AC-FT	19	70	448	441	152	325	105	28	35	16	17	28

CAL YR 1972 TOTAL 2,124.09 MEAN 5.80 MAX 110 MIN .08 CFSM 1.73 IN 23.59 AC-FT 4,210
WTR YR 1973 TOTAL 848.51 MEAN 2.32 MAX 30 MIN .08 CFSM .69 IN 9.42 AC-FT 1,680

PEAK DISCHARGE (BASE, 125 CFS).--No peak above base.

14170000 LONG TOM RIVER AT MONROE, OREG.

LOCATION.--Lat 44°18'50", long 123°17'45", in NE¼ sec.33, T.14 S., R.5 W., Benton County, on left bank in canalized river channel at Monroe, 110 ft (34 m) upstream from bridge on State Highway 99W, 0.1 mi (0.2 km) downstream from Shafer Creek, and at mile 6.8 (10.9 km).

DRAINAGE AREA.--391 mi² (1,013 km²).

PERIOD OF RECORD.--November 1920 to July 1921, October 1921 to April 1926, November 1926 to May 1927, October 1927 to current year. Prior to October 1930, published as "near Monroe."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 270.57 ft (82.470 m) above mean sea level. Prior to Nov. 24, 1944, nonrecording gage at various sites ranging from present site to 1.5 mi (2.4 km) downstream at different datums.

AVERAGE DISCHARGE.--50 years (1921-23, 1927-73), 778 ft³/s (22.0 m³/s), 563,700 acre-ft/yr (695 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,700 ft³/s (133 m³/s) Dec. 22, gage height, 8.05 ft (2.454 m); minimum, 20 ft³/s (0.57 m³/s) July 10.

Period of record: Maximum discharge, 19,300 ft³/s (547 m³/s) Jan. 2, 1943, gage height, 17.14 ft (5.224 m), site and datum then in use, from graph based on gage readings, includes some overflow from Willamette River near Junction City; no flow Oct. 20-22, 1944 (water filling pool at gage); minimum observed prior to regulation, 7 ft³/s (0.20 m³/s) Sept. 29, Oct. 1, 1939.

REMARKS.--Records good. Flow regulated since 1941 by Fern Ridge Lake (see station 14168000). Several small diversions above station.

REVISIONS (WATER YEARS).--WSP 654: Drainage area. WSP 1248: 1923, 1927, 1928(M). WSP 1288: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	829	97	931	660	384	510	83	47	40	30	46
2	68	839	100	799	536	484	352	79	48	39	31	47
3	68	869	134	790	456	367	268	81	45	33	31	45
4	65	985	201	669	317	349	234	89	42	30	28	46
5	65	1,050	176	527	274	294	214	92	43	31	30	47
6	65	1,020	108	613	256	347	194	83	35	29	34	49
7	65	1,010	117	441	234	292	181	78	29	28	31	53
8	65	1,010	88	323	191	241	174	76	31	27	34	55
9	274	1,020	55	419	191	222	169	78	31	29	33	54
10	985	1,050	38	383	201	266	164	77	32	23	32	58
11	1,010	1,050	38	613	186	273	158	73	31	26	32	59
12	1,030	1,040	38	2,020	191	223	154	70	31	30	39	59
13	1,020	1,020	65	3,830	186	210	159	61	31	32	40	60
14	1,030	995	95	3,410	172	208	164	56	32	30	37	56
15	1,040	641	95	2,800	167	192	155	48	28	32	38	56
16	1,030	323	100	2,780	157	182	151	52	29	33	36	56
17	1,020	65	839	2,740	162	189	177	48	38	28	36	57
18	1,030	62	1,530	2,390	167	184	191	46	43	29	35	61
19	1,040	126	2,340	2,330	152	499	199	45	45	31	34	69
20	1,210	223	2,580	1,980	147	524	160	43	39	30	34	69
21	1,550	157	3,860	1,910	143	403	136	41	36	31	36	71
22	1,560	196	4,290	1,530	143	336	127	43	29	35	36	74
23	1,550	108	3,380	931	138	268	118	46	31	36	38	75
24	1,550	108	3,610	1,060	139	234	112	58	37	37	46	78
25	1,240	121	3,390	1,130	277	213	100	63	41	33	47	80
26	849	121	2,900	974	300	198	95	60	44	31	45	76
27	849	121	3,020	819	381	216	91	56	50	32	50	74
28	859	104	2,860	790	277	250	88	52	46	32	49	72
29	839	100	2,160	734	------	207	87	45	39	33	48	70
30	839	97	1,590	604	------	199	88	37	39	34	47	72
31	839	------	1,130	706	------	293	------	35	------	30	47	------
TOTAL	24,772	16,460	41,016	41,976	6,801	8,747	5,170	1,894	1,122	974	1,163	1,844
MEAN	799	549	1,323	1,354	243	282	172	61.1	37.4	31.4	37.5	61.5
MAX	1,560	1,050	4,290	3,830	660	524	510	92	50	40	50	80
MIN	65	62	38	323	138	182	87	35	28	23	28	45
AC-FT	49,140	32,650	81,360	83,260	13,490	17,350	10,250	3,760	2,230	1,930	2,310	3,660

CAL YR 1972 TOTAL 333,904 MEAN 912 MAX 6,490 MIN 33 AC-FT 662,300
WTR YR 1973 TOTAL 151,939 MEAN 416 MAX 4,290 MIN 23 AC-FT 301,400

14171000 MARYS RIVER NEAR PHILOMATH, OREG.

LOCATION.--Lat 44°31'35", long 123°20'00", in NE¼SE¼ sec.18, T.12 S., R.5 W., Benton County, on left bank 50 ft (15 m) downstream from bridge on Bellfountain Road, 0.6 mi (1.0 km) downstream from Newton Creek, 2.0 mi (3.2 km) southeast of Philomath, and at mile 9.4 (15.1 km).

DRAINAGE AREA.--159 mi^2 (412 km^2), including drainage area of Evergreen Creek above Bellfountain Road, 1.4 mi (2.3 km) south of station.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.01 ft (68.278 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1961, nonrecording gage at bridge 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--33 years, 466 ft^3/s (13.2 m^3/s), 39.80 in/yr (1,011 mm/yr), 337,600 acre-ft/yr (416 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,390 ft^3/s (96.0 m^3/s) Dec. 22, gage height, 17.75 ft (5.410 m); minimum, 3.9 ft^3/s (0.11 m^3/s) Sept. 5.

Period of record: Maximum discharge, 13,600 ft^3/s (385 m^3/s) Dec. 22, 1964, gage height, 20.72 ft (6.315 m); maximum gage height observed, 20.83 ft (6.349 m) Dec. 21, 1955, minimum discharge, 0.60 ft^3/s (0.017 m^3/s) Aug. 23, 1967.

REMARKS.--Records fair. Records include flow of Evergreen Creek at Bellfountain Road crossing 1.4 mi (2.3 km) south of station, with which overflow from Marys River may at times be mingled. Slight regulation by small storage reservoir on Rock Creek from which municipal supply is diverted for city of Corvallis. Other small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1218: Drainage area. WSP 1935: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	19	80	700	469	519	397	147	58	32	15	9.2
2	15	26	75	580	429	562	372	140	57	30	10	9.4
3	15	47	77	500	399	519	345	136	57	27	14	6.6
4	14	122	77	450	370	475	322	145	54	25	10	5.9
5	13	105	70	400	342	429	303	142	51	23	9.0	4.4
6	12	73	70	370	319	426	282	128	47	22	8.6	5.5
7	11	64	53	350	297	381	256	123	46	22	7.4	7.6
8	10	58	44	320	276	343	240	124	44	22	8.2	13
9	11	63	41	300	259	318	225	124	44	18	8.8	13
10	12	127	40	330	267	394	208	125	45	17	8.2	9.2
11	14	118	39	400	255	454	192	118	41	17	10	6.6
12	13	73	38	600	237	412	183	108	39	16	12	5.6
13	13	57	36	1,500	220	415	183	101	41	16	12	5.4
14	13	49	35	1,950	210	387	174	95	41	15	10	5.6
15	13	44	50	1,600	196	355	163	89	42	14	9.2	6.8
16	12	39	65	1,200	186	342	168	84	49	12	8.4	7.2
17	11	36	324	1,650	192	354	229	80	76	10	9.6	6.8
18	12	53	520	1,400	211	352	285	75	91	10	10	8.4
19	12	163	782	1,300	189	568	390	73	68	10	9.6	11
20	12	118	850	1,110	176	640	339	73	52	11	9.2	30
21	11	92	2,210	996	167	600	289	73	44	13	7.8	37
22	12	87	2,780	842	161	529	259	71	38	15	6.2	36
23	12	81	2,040	722	156	466	237	74	38	14	7.4	50
24	12	71	2,090	760	152	420	214	96	38	13	16	56
25	12	67	1,700	768	453	384	198	98	43	12	25	58
26	12	137	1,250	630	568	352	184	88	46	12	20	53
27	13	205	1,280	550	525	349	174	79	44	12	18	35
28	14	140	1,390	505	442	360	165	74	38	12	15	25
29	26	110	1,190	467	------	333	158	69	34	12	12	21
30	31	92	964	483	------	319	154	63	33	12	11	19
31	24	------	800	532	------	352	------	59	------	12	12	------
TOTAL	434	2,536	21,060	24,265	8,123	13,109	7,288	3,074	1,439	508	349.6	567.2
MEAN	14.0	84.5	679	783	290	423	243	99.2	48.0	16.4	11.3	18.9
MAX	31	205	2,780	1,950	568	640	397	147	91	32	25	58
MIN	10	19	35	300	152	318	154	59	33	10	6.2	4.4
CFSM	.09	.53	4.27	4.92	1.82	2.66	1.53	.62	.30	.10	.07	.12
IN.	.10	.59	4.93	5.68	1.90	3.07	1.71	.72	.34	.12	.08	.13
AC-FT	861	5,030	41,770	48,130	16,110	26,000	14,460	6,100	2,850	1,010	693	1,130

CAL YR 1972 TOTAL 185,896.2 MEAN 508 MAX 8,500 MIN 8.0 CFSM 3.20 IN 43.49 AC-FT 368,700
WTR YR 1973 TOTAL 82,752.8 MEAN 227 MAX 2,780 MIN 4.4 CFSM 1.43 IN 19.36 AC-FT 164,100

PEAK DISCHARGE (BASE, 3,200 CFS).--Dec. 22 (1100) 3,390 cfs (17.75 ft).

14172000 CALAPOOIA RIVER AT HOLLEY, OREG.

LOCATION.--Lat 44°21'05", long 122°47'10", in SE¼ sec.15, T.14 S., R.1 W., Linn County, on right bank 200 ft (61 m) downstream from bridge on State Highway 228, 0.3 mi (0.5 km) southwest of Holley, 5.0 mi (8.0 km) upstream from Brush Creek, and at mile 45.4 (73.0 km).

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--September 1935 to current year. Prior to October 1963, published as Calapooya River at Holley.

GAGE.--Water-stage recorder. Datum of gage is 527.58 ft (160.806 m) above mean sea level. Prior to Oct. 7, 1963, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 444 ft³/s (12.6 m³/s), 57.42 in/yr (1,458 mm/yr), 321,700 acre-ft/yr (397 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,330 ft³/s (66.0 m³/s) Dec. 23, Jan. 13, gage height, 4.86 ft (1.481 m); minimum, 23 ft³/s (0.651 m³/s) Sept. 5, 17.

Period of record: Maximum discharge, 12,600 ft³/s (357 m³/s) Dec. 22, 1964, gage height, 14.60 ft (4.450 m); maximum gage height, 15.30 ft (4.663 m) Dec. 22, 1964 (backwater from debris); minimum discharge observed, 13 ft³/s (0.368 m³/s) Sept. 8, 1940.

REMARKS.--Records excellent. Slight regulation at times during low-water periods by small dam upstream. Diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1044: 1943. WSP 1218: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	50	135	555	398	500	453	221	95	89	39	27
2	39	239	140	581	366	510	457	209	94	85	38	26
3	38	197	188	540	347	462	430	200	90	80	38	26
4	37	266	160	462	343	435	402	197	87	77	37	25
5	35	245	138	414	343	414	398	183	83	74	37	24
6	34	183	110	374	347	414	374	175	79	73	37	24
7	33	173	95	336	319	378	340	175	76	71	37	48
8	33	206	90	308	294	347	312	191	74	68	36	44
9	33	178	85	291	277	329	294	194	73	65	36	33
10	42	287	80	280	305	630	280	173	71	64	36	29
11	55	226	78	414	308	597	266	160	70	61	35	26
12	46	168	76	1.230	291	495	252	150	73	60	35	26
13	41	140	74	2.180	270	471	252	145	77	59	34	25
14	47	123	78	1.510	252	435	233	138	73	57	33	24
15	40	110	100	1.050	239	402	215	131	82	56	32	25
16	37	101	212	1.340	227	414	284	125	97	53	31	24
17	35	94	1.220	1.180	256	430	453	119	277	53	33	24
18	34	101	1.260	957	252	402	430	113	266	52	32	28
19	33	127	1.400	786	233	505	475	110	178	51	32	37
20	33	111	1.240	678	221	505	485	104	138	52	31	77
21	33	106	1.730	625	212	485	453	102	117	55	30	99
22	33	102	1.730	540	203	462	475	99	106	53	30	97
23	32	95	1.670	485	194	430	457	101	99	51	30	153
24	32	92	2.000	535	191	406	402	188	94	48	42	322
25	32	90	1.430	560	301	394	366	227	104	47	56	294
26	39	298	1.040	475	284	366	343	160	153	46	40	155
27	38	280	1.290	430	301	358	315	133	127	45	33	108
28	56	206	1.200	394	287	354	287	123	109	44	30	85
29	67	175	915	378	------	326	259	113	99	42	28	73
30	52	153	750	430	------	343	239	106	94	40	29	65
31	46	------	654	453	------	430	------	101	------	39	30	------
TOTAL	1.225	4.920	21.368	20.771	7.861	13.429	10.681	4.666	3.254	1.810	1.077	2.073
MEAN	39.5	164	689	670	281	433	356	151	108	58.4	34.7	69.1
MAX	67	298	2.000	2.180	398	630	485	227	277	89	56	322
MIN	32	50	74	280	191	326	215	99	70	39	28	24
CFSM	.38	1.56	6.56	6.38	2.68	4.12	3.39	1.44	1.03	.56	.33	.66
IN.	.43	1.74	7.57	7.36	2.79	4.76	3.78	1.65	1.15	.64	.38	.73
AC-FT	2.430	9.760	42.380	41.200	15.590	26.640	21.190	9.260	6.450	3.590	2.140	4.110

CAL YR 1972 TOTAL 194.891 MEAN 532 MAX 7.050 MIN 25 CFSM 5.07 IN 69.05 AC-FT 386.600
WTR YR 1973 TOTAL 93.135 MEAN 255 MAX 2.180 MIN 24 CFSM 2.43 IN 33.00 AC-FT 184.700

PEAK DISCHARGE (BASE, 3,400 CFS).--No peak above base.

14173500 CALAPOOIA RIVER AT ALBANY, OREG.

LOCATION.--Lat 44°37'15", long 123°07'40", in NW¼ sec.13, T.11 S., R.4 W., Linn County, near right bank on downstream side of bridge on Riverside Drive at Albany, 0.6 mi (1.0 km) downstream from Oak Creek, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--372 mi^2 (963 km^2).

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1963, published as Calapooya River at Albany.

GAGE.--Water-stage recorder. Datum of gage is 180.85 ft (55.123 m) above mean sea level. Prior to May 11, 1962, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 919 ft^3/s (26.0 m^3/s), 33.55 in/yr (852 mm/yr), 665,800 acre-ft/yr (821 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,680 ft^3/s (161 m^3/s) Jan. 14, gage height, 14.17 ft (4.319 m); minimum, 7.4 ft^3/s (0.21 m^3/s) Aug. 14.

Period of record: Maximum discharge observed, 32,700 ft^3/s (926 m^3/s) Dec. 22, 1955, gage height, 22.12 ft (6.742 m); maximum gage height, 25.5 ft (7.77 m) Jan. 2, 1943, from graph based on gage readings (backwater from Willamette River); minimum discharge, 3.5 ft^3/s (0.099 m^3/s) Sept. 7, 1967.

REMARKS.--Records good. Higher flows are affected by backwater from Willamette River at times. Diurnal fluctuation caused by ponds at flour mills near Shedd. Diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1218: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	66	199	1,090	872	879	1,090	298	120	103	31	24
2	58	53	187	1,080	712	1,510	1,130	278	114	77	33	19
3	43	116	193	1,260	637	1,120	831	263	108	88	26	15
4	22	242	247	1,220	586	978	705	251	108	78	25	21
5	39	248	224	952	569	879	641	248	104	61	21	29
6	47	272	201	879	559	1,030	596	234	98	70	14	21
7	39	203	190	743	531	1,080	542	229	95	65	19	23
8	32	194	170	610	488	753	479	225	85	56	27	23
9	33	217	150	528	447	637	447	229	91	57	26	22
10	36	221	140	497	424	692	415	238	73	70	29	34
11	50	265	125	634	456	1,130	387	221	76	52	28	36
12	48	290	115	1,960	453	941	367	202	84	44	20	24
13	66	189	110	4,700	462	808	357	192	72	48	13	26
14	62	170	105	5,420	430	811	350	189	81	48	12	22
15	52	155	100	3,830	395	746	330	176	79	42	24	23
16	46	155	95	2,900	374	637	315	169	83	39	25	18
17	35	134	543	3,840	364	842	392	162	90	46	24	13
18	35	104	2,510	3,080	439	896	566	153	240	45	23	27
19	40	126	2,770	2,000	453	1,410	607	144	268	40	20	27
20	32	134	3,210	1,490	389	2,310	644	167	192	39	14	28
21	46	154	4,010	1,290	362	1,410	624	102	162	33	9.7	24
22	33	138	4,690	1,090	340	1,090	562	127	133	61	22	72
23	35	131	4,430	944	320	879	576	114	117	17	24	107
24	52	157	4,380	1,000	310	750	538	127	108	36	29	106
25	44	107	4,770	1,580	450	678	477	189	111	42	26	276
26	41	117	3,480	1,180	848	634	436	248	113	35	19	298
27	40	212	2,490	907	989	589	407	198	146	32	16	189
28	30	315	3,210	797	838	787	374	171	144	36	40	134
29	43	242	2,620	712	------	712	342	157	120	29	40	104
30	51	221	1,690	760	------	579	325	141	116	19	31	90
31	69	------	1,400	985	------	712	------	130	------	31	24	------
TOTAL	1,367	5,348	48,754	49,958	14,497	28,909	15,852	5,972	3,531	1,539	734.7	1,875
MEAN	44.1	178	1,573	1,612	518	933	528	193	118	49.6	23.7	62.5
MAX	69	315	4,770	5,420	989	2,310	1,130	298	268	103	40	298
MIN	22	53	95	497	310	579	315	102	72	17	9.7	13
CFSM	.12	.48	4.23	4.33	1.39	2.51	1.42	.52	.32	.13	.06	.17
IN.	.14	.53	4.88	5.00	1.45	2.89	1.59	.60	.35	.15	.07	.19
AC-FT	2,710	10,610	96,700	99,090	28,750	57,340	31,440	11,850	7,000	3,050	1,460	3,720

CAL YR 1972 TOTAL 387,702.0 MEAN 1,059 MAX 19,800 MIN 8.0 CFSM 2.85 IN 38.77 AC-FT 769,000
WTR YR 1973 TOTAL 178,336.7 MEAN 489 MAX 5,420 MIN 9.7 CFSM 1.31 IN 17.83 AC-FT 353,700

14174000 WILLAMETTE RIVER AT ALBANY, OREG.

LOCATION.--Lat 44°38'20", long 123°06'20", in SW¼ sec.6, T.11 S., R.3 W., Linn County, on right bank 5 ft (1.5 m) upstream from bridge on U.S. Highway 20 (Ellsworth Street) in Albany, 0.2 mi (0.3 km) downstream from Calapooia River, and at mile 119.31 (191.97 km).

DRAINAGE AREA.--4,840 mi² (12,500 km²), approximately.

PERIOD OF RECORD.--November 1878 to April 1888 (fragmentary), January to June 1892, November 1892 to September 1894, December 1894 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 167.18 ft (50.956 m) above mean sea level. Prior to Sept. 27, 1906, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 5.00 ft (1.524 m) higher. Sept. 27, 1906, to Nov. 12, 1934, nonrecording gage at site 300 ft (91 m) upstream at datum 5.00 ft (1.524 m) higher. Nov. 14, 1934, to Sept. 30, 1962, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--79 years (1893-94, 1895-73), 14,490 ft³/s (410 m³/s), 40.66 in/yr (1,033 mm/yr), 10,500,000 acre-ft/yr (12.9 km³/yr).

EXTREMES.--Current year: Maximum discharge, 44,600 ft³/s (1,260 m³/s) Dec. 25, gage height, 16.54 ft (5.041 m); minimum, 3,810 ft³/s (108 m³/s) May 30.

Period of record: Maximum discharge, 266,000 ft³/s (7,530 m/s) Jan. 14, 1881, gage height, 37.8 ft (11.52 m), present datum; minimum, 1,840 ft³/s (52.1 m³/s) Sept. 1, 2, 1940.

Flood of Dec. 4, 1861, reached a stage of 41.0 ft (12.50 m), discharge, 340,000 ft³/s (9,630 m³/s), from rating curve extended above 220,000 ft³/s (6,230 m³/s). Flood of Feb. 4, 1890, reached a stage of 38.9 ft (11.86 m), discharge, 291,000 ft³/s (8,240 m³/s).

REMARKS.--Records excellent. Flow regulated by nine reservoirs above station (see elsewhere in this report). Albany power canal diverts water from South Santiam River at Lebanon and discharges into Calapooia River near mouth; small diversions for irrigation and municipal water supply. Records of water temperatures for the current year at site 0.6 mi (1.0 km) upstream are published as "Willamette River above Calapooia River, at Albany" in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 694: Drainage area. WSP 904: 1939. WSP 1964. 1881, 1890, 1894, 1897, 1901, 1903, 1908, 1910, 1916, 1923, 1927, 1932(M). WSP 984: 1916. WSP 1248: 1895, 1902, 1907, 1915(M), 1917(M), 1918-19, 1934(M). WSP 1318 (monthly and annual figures only): 1894, 1897, 1901-3, 1907-8, 1910, 1916, 1918-19, 1923, 1927.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,920	9,230	8,360	21,900	11,100	8,420	10,400	5,880	3,990	4,240	4,350	5,180
2	8,280	9,660	8,060	19,800	10,400	10,700	11,400	5,730	4,040	4,170	4,290	5,040
3	7,250	10,000	8,180	18,300	9,780	10,600	10,900	5,570	4,220	4,110	4,220	5,040
4	6,500	10,000	9,150	16,300	9,400	10,000	10,100	5,530	4,120	4,060	4,210	4,960
5	6,250	11,300	9,500	14,600	9,210	9,560	9,310	5,590	4,040	4,070	4,270	4,930
6	6,210	11,600	9,860	13,700	9,070	9,420	8,850	5,440	4,030	4,140	4,370	4,960
7	6,270	11,200	9,880	12,300	9,030	9,500	8,540	5,290	4,070	4,170	4,490	5,090
8	6,210	11,200	9,540	11,000	8,600	8,730	8,060	5,200	3,990	4,190	4,540	5,090
9	6,160	10,900	8,850	10,300	8,100	8,180	7,650	5,220	4,140	4,270	4,450	4,800
10	6,710	10,800	6,880	10,600	7,850	8,180	7,290	5,200	4,170	4,260	4,440	4,820
11	7,210	11,600	6,560	10,800	7,830	10,600	6,490	5,060	4,170	4,190	4,340	4,750
12	7,670	11,500	7,850	15,400	7,750	10,800	6,210	4,400	4,160	4,160	4,290	4,600
13	7,490	10,900	8,730	30,800	7,590	9,980	6,280	4,200	4,120	4,170	4,290	4,620
14	7,530	10,700	7,510	40,900	7,350	9,760	6,430	4,000	4,030	4,190	4,320	4,750
15	7,690	10,300	5,720	32,400	7,150	9,380	6,300	4,000	4,030	4,290	4,320	4,780
16	7,490	9,780	5,180	32,800	6,920	8,890	6,100	4,000	4,170	4,290	4,270	4,800
17	7,470	9,050	6,760	37,800	6,780	9,030	6,340	4,620	4,570	4,270	4,850	4,670
18	7,370	8,420	17,900	40,100	6,980	9,440	8,000	4,490	5,420	4,340	5,350	4,850
19	7,350	8,540	24,600	36,700	7,040	10,200	9,130	4,390	5,460	4,490	5,440	5,070
20	7,270	8,750	32,500	31,400	6,840	13,900	9,900	4,390	4,720	4,490	5,480	5,240
21	8,240	8,770	38,200	24,000	6,670	13,200	9,860	4,300	4,350	4,550	5,480	5,440
22	9,030	8,340	41,000	21,500	6,490	11,900	9,500	4,270	4,140	4,590	5,510	5,550
23	9,010	7,920	40,100	18,900	6,320	11,200	9,010	4,240	4,010	4,590	5,530	5,720
24	8,970	7,630	41,800	17,200	6,270	10,400	8,670	4,420	4,210	4,450	5,640	5,990
25	9,070	7,370	44,000	17,600	6,690	9,660	8,040	4,910	4,490	4,240	5,280	6,690
26	8,910	7,330	38,700	17,000	8,120	9,210	7,370	5,200	4,520	4,220	5,200	6,920
27	9,010	8,400	33,900	15,100	8,560	8,870	6,960	4,640	4,520	4,270	5,090	6,080
28	9,190	8,910	36,800	12,400	8,580	9,050	6,670	4,320	4,440	4,320	5,000	5,700
29	9,420	8,970	39,200	11,300	------	8,890	6,380	4,110	4,010	4,400	5,000	5,700
30	9,330	8,670	33,100	10,800	------	8,460	6,080	3,930	4,070	4,400	5,020	5,530
31	9,310	------	26,400	11,100	------	8,790	------	4,170	------	4,350	5,310	------
TOTAL	243,790	287,740	624,770	634,800	222,470	304,900	242,220	146,710	128,420	132,940	148,640	157,360
MEAN	7,864	9,591	20,150	20,480	7,945	9,835	8,074	4,733	4,281	4,288	4,795	5,245
MAX	9,920	11,600	44,000	40,900	11,100	13,900	11,400	5,880	5,460	4,590	5,640	6,920
MIN	6,160	7,330	5,180	10,300	6,270	8,180	6,080	3,930	3,990	4,060	4,210	4,600
CFSM	1.62	1.98	4.16	4.23	1.64	2.03	1.67	.98	.88	.89	.99	1.08
IN.	1.87	2.21	4.80	4.88	1.71	2.34	1.86	1.13	.99	1.02	1.14	1.21
AC-FT	483,600	570,700	1,239M	1,259M	441,300	604,800	480,400	291,000	254,700	263,700	294,800	312,100

CAL YR 1972 TOTAL 6,786,550 MEAN 18,540 MAX 98,800 MIN 5,020 CFSM 3.83 IN 52.16 AC-FT 13,460,000

WTR YR 1973 TOTAL 3,274,760 MEAN 8,972 MAX 44,000 MIN 3,930 CFSM 1.85 IN 25.17 AC-FT 6,495,000

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OREG.

LOCATION.--Lat 44°42'25", long 122°06'00", in SE¼NW¼ sec.17, T.10 S., R.6 E., Marion County, on right bank 0.5 mi (0.8 km) downstream from Boulder Creek, 3.0 mi (4.8 km) southeast of Detroit, and at mile 70.7 (113.8 km).

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--January 1907 to October 1909, October 1928 to current year. Monthly discharge only January 1907, published in WSP 1318. Prior to October 1952, published as "at Detroit."

GAGE.--Water-stage recorder. Datum of gage is 1,590.07 ft (484.653 m) above mean sea level. See WSP 1738 for history of changes prior to Oct. 1, 1952.

AVERAGE DISCHARGE.--47 years, 1,005 ft³/s (28.5 m³/s), 63.18 in/yr (1,605 mm/yr), 728,100 acre-ft/yr (898 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,420 ft³/s (182 m³/s) Dec. 21, gage height, 7.79 ft (2.374 m); minimum, 335 ft³/s (9.49 m³/s) Sept. 13, 15-17.

Period of record: Maximum discharge, 26,700 ft³/s (756 m³/s) Dec. 22, 1964, gage height, 13.76 ft (4.194 m), temporary backwater from debris, from rating curve extended above 6,600 ft³/s (187 m³/s) on basis of slope-area measurement of peak flow; minimum, 250 ft³/s (7.08 m³/s) Sept. 13, 1909.

REMARKS.--Records excellent. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 814: Drainage area at former site. WSP 1248: 1931.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	532	542	1.130	820	1.140	716	844	618	505	400	355
2	533	675	599	1.090	804	1.060	684	844	597	495	400	355
3	528	708	595	1.020	788	1.010	676	860	584	490	400	350
4	522	838	558	945	788	954	684	876	578	490	395	350
5	516	860	537	909	812	909	716	836	566	490	395	355
6	513	715	530	868	804	876	748	828	566	480	395	360
7	509	672	520	812	780	844	740	852	566	470	390	425
8	509	653	510	780	756	820	732	909	560	465	390	385
9	510	637	500	772	748	828	740	892	554	465	390	370
10	530	711	490	764	796	1.070	764	868	536	460	385	370
11	544	656	490	860	788	1.040	796	820	520	455	385	365
12	522	611	485	1.570	772	963	836	820	525	450	380	360
13	522	595	480	3.760	748	936	927	884	536	450	380	350
14	518	578	480	3.300	740	884	892	1.010	520	455	380	350
15	513	560	475	2.500	724	852	868	1.030	525	455	380	345
16	509	547	554	2.530	724	860	1.040	990	618	450	375	340
17	504	538	909	2.130	764	852	1.180	936	764	445	370	340
18	499	537	1.350	1.840	748	836	1.070	892	692	435	370	355
19	495	534	3.880	1.590	732	836	1.020	852	632	445	370	380
20	494	524	3.360	1.410	716	812	963	804	597	455	370	440
21	496	519	5.730	1.280	708	796	936	740	572	440	370	465
22	495	514	4.400	1.170	700	788	972	708	566	430	365	475
23	491	511	3.700	1.100	692	764	990	700	554	420	365	618
24	487	508	3.360	1.080	700	756	954	945	536	415	395	748
25	486	594	2.530	1.040	836	748	954	918	584	415	385	716
26	500	956	2.000	963	868	748	972	788	668	420	370	525
27	492	774	2.120	927	936	732	1.020	724	597	420	365	450
28	519	698	1.870	900	954	724	972	684	560	420	365	430
29	505	651	1.550	876	------	700	918	668	536	410	365	410
30	495	617	1.370	876	------	708	876	660	515	410	365	395
31	491	------	1.220	852	------	732	------	646	------	400	365	------
TOTAL	15.787	19.023	47.744	41.644	21.746	26.578	26.356	25.628	17.342	13.905	11.775	12.542
MEAN	509	634	1.540	1.343	777	857	879	833	578	449	380	418
MAX	544	956	5.730	3.760	954	1.140	1.180	1.030	764	505	400	748
MIN	486	508	475	764	692	700	676	646	515	400	365	340
CFSM	2.36	2.94	7.13	6.22	3.60	3.97	4.07	3.86	2.68	2.08	1.76	1.94
IN.	2.72	3.28	8.22	7.17	3.75	4.58	4.54	4.45	2.99	2.39	2.03	2.16
AC-FT	31.310	37.730	94.700	82.600	43.130	52.720	52.280	51.230	34.400	27.580	23.360	24.880

CAL YR 1972 TOTAL 501.318 MEAN 1.370 MAX 9.640 MIN 475 CFSM 6.34 IN 86.34 AC-FT 994.400
WTR YR 1973 TOTAL 280.270 MEAN 768 MAX 5.730 MIN 340 CFSM 3.56 IN 48.27 AC-FT 555.900

PEAK DISCHARGE (BASE, 3,700 CFS).--Dec. 21 (0430) 6,420 cfs (7.79 ft); Jan. 13 (1530) 4,320 cfs (6.87 ft).

14179000 BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT, OREG.

LOCATION.--Lat 44°45'10", long 122°07'40", in SE¼NE¼ sec.36, T.9 S., R.5 E., Marion County, in Willamette National Forest, on left bank 600 ft (183 m) upstream from Canyon Creek, 1.5 mi (2.4 km) northeast of Detroit, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--106 mi^2 (275 km^2).

PERIOD OF RECORD.--June 1932 to current year. Monthly discharge only June 1932, published in WSP 1318. Prior to October 1952, published as "above French Creek, near Detroit."

GAGE.--Water-stage recorder. Datum of gage is 1,573.95 ft (479.740 m) above mean sea level. Prior to Oct. 1, 1952, at site 0.2 mi (0.3 km) downstream at datum 13.46 ft (4.103 m) lower.

AVERAGE DISCHARGE.--41 years, 575 ft^3/s (16.3 m^3/s), 73.67 in/yr (1,871 mm/yr), 416,600 acre-ft/yr (514 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,780 ft^3/s (164 m^3/s) Dec. 21, gage height, 8.68 ft (2.646 m); minimum, 95 ft^3/s (2.69 m^3/s) Sept. 17.
Period of record: Maximum discharge, 16,900 ft^3/s (479 m^3/s) Dec. 22, 1964, gage height, 14.55 ft (4.435 m); minimum, 87 ft^3/s (2.46 m^3/s) Sept. 2, 1940.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1044: 1943(M). WSP 1248: 1947.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	229	262	597	375	731	309	379	273	204	120	104
2	203	335	276	575	360	670	301	379	250	194	118	104
3	198	368	276	530	356	602	297	407	240	188	118	102
4	195	555	243	471	379	545	297	407	243	184	118	102
5	190	504	220	446	407	498	318	370	240	181	116	100
6	187	353	218	411	416	461	327	365	260	178	116	102
7	186	316	208	379	388	431	314	375	280	172	116	125
8	184	297	200	356	365	407	305	402	277	166	114	114
9	184	304	200	346	346	398	309	384	250	164	114	107
10	195	408	195	327	356	581	318	375	229	158	114	104
11	199	347	195	402	351	555	332	346	213	155	114	102
12	191	296	190	1,890	341	509	375	351	216	152	111	102
13	193	276	190	3,580	327	482	426	461	232	149	111	100
14	191	256	190	2,370	318	456	402	613	210	147	111	100
15	188	241	190	1,550	309	431	379	624	204	144	109	100
16	184	230	262	1,460	314	436	466	586	250	142	109	98
17	181	222	1,270	1,250	370	426	555	520	370	139	109	98
18	179	224	1,560	1,040	360	407	525	491	318	137	109	102
19	178	222	3,490	864	346	416	509	461	291	139	107	114
20	176	216	2,840	743	327	398	504	389	293	142	107	139
21	177	212	4,510	653	318	384	488	326	288	137	107	197
22	175	207	2,640	592	309	375	530	302	276	135	107	194
23	174	205	2,150	545	301	356	535	318	254	132	107	327
24	172	201	1,950	545	305	346	498	510	240	130	130	636
25	172	301	1,500	540	441	346	477	439	309	130	120	509
26	176	853	1,200	482	477	336	493	326	411	127	111	284
27	173	485	1,350	451	531	322	530	287	305	127	109	220
28	190	368	1,160	426	535	309	488	273	258	125	109	144
29	183	318	908	411	------	297	436	287	233	123	107	166
30	176	283	769	407	------	301	402	318	217	123	107	155
31	176	------	665	393	------	314	------	302	------	120	107	------
TOTAL	5,735	9,632	31,477	25,032	10,328	13,526	12,445	12,373	7,930	4,644	3,482	4,991
MEAN	185	321	1,015	807	369	436	415	399	264	150	112	166
MAX	207	853	4,510	3,580	535	731	555	624	411	204	130	636
MIN	172	201	190	327	301	297	297	273	204	120	107	98
CFSM	1.75	3.03	9.58	7.61	3.48	4.11	3.92	3.76	2.49	1.42	1.06	1.57
IN.	2.01	3.38	11.05	8.78	3.62	4.75	4.37	4.34	2.78	1.63	1.22	1.75
AC-FT	11,380	19,110	62,430	49,650	20,490	26,830	24,680	24,540	15,730	9,210	6,910	9,900

CAL YR 1972 TOTAL 292,602 MEAN 799 MAX 7,150 MIN 172 CFSM 7.54 IN 102.69 AC-FT 580,400
WTR YR 1973 TOTAL 141,595 MEAN 388 MAX 4,510 MIN 98 CFSM 3.66 IN 49.69 AC-FT 280,900

PEAK DISCHARGES (BASE, 4,000 CFS).--Dec. 21 (0030) 5,780 cfs (8.68 ft); Jan. 13 (1300) 4,070 cfs (7.51 ft).

14180500 DETROIT LAKE NEAR DETROIT, OREG.

LOCATION.--Lat 44°43'20", long 122°14'55", in SW¼NW¼ sec.7, T.10 S., R.5 E., Marion County, in control house near right abutment of Detroit Dam on North Santiam River, 4.9 mi (7.9 km) west of Detroit, and at mile 60.9 (98.0 km).

DRAINAGE AREA.--437 mi² (1,132 km²).

PERIOD OF RECORD.--January 1953 to current year. Prior to October 1971, published as Detroit Reservoir near Detroit.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 409,900 acre-ft (505 hm³) July 2, elevation, 1,555.83 ft (474.217 m); minimum, 117,400 acre-ft (145 hm³) Dec. 16, elevation, 1,426.68 ft (434.852 m).
Period of record: Maximum contents, 457,900 acre-ft (565 hm³) July 13, 1972, elevation, 1,569.79 ft (478.472 m); minimum, 115,500 acre-ft (142 hm³) Jan. 30, 1969, elevation, 1,425.37 ft (434.453 m).

REMARKS.--Reservoir is formed by concrete, gravity-type dam with six 42-ft (12.8 m) by 28-ft ((8.5 m) control gates. Length of dam is 1,580 ft (481.6 m) built by Corps of Engineers. Storage began in January 1953. Total capacity is 455,100 acre-ft (561 hm³) and usable capacity is 340,100 acre-ft (419 hm³) between elevations 1,425.0 ft (434.34 m), proposed lower limit of operation, and 1,569.0 ft (478.23 m), top of spillway gates. Reservoir used for flood control, power development, irrigation, improvement of navigation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,425	115,000	1,480	210,900	1,530	331,500
1,430	122,200	1,490	232,000	1,540	360,200
1,440	137,700	1,500	254,600	1,550	390,900
1,450	154,400	1,510	278,700	1,560	424,000
1,460	172,200	1,520	304,400	1,570	458,600
1,470	191,100				

CONTENTS. IN ACHE-FEET. AT 2400. WATER YEAR OCTOBFR 1972 TO SFPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326.900	252.400	181.100	194.400	179.600	212.400	266.200	334.300	388.400	409.800	390.600	357.600
2	324.300	250.900	179.700	188.100	179.300	218.000	267.000	336.300	389.200	409.900	389.700	356.600
3	322.100	249.000	176.600	181.700	180.400	220.900	268.000	338.600	390.000	409.700	389.100	353.600
4	320.100	247.900	172.800	174.600	181.700	223.200	268.800	340.700	390.600	409.000	388.600	349.400
5	317.900	246.200	168.500	173.000	183.200	225.200	269.800	342.500	390.800	408.600	387.200	348.300
6	315.800	243.500	163.700	169.100	184.700	227.000	271.000	344.300	391.800	408.500	387.200	346.500
7	313.900	240.600	157.400	166.600	185.800	228.600	272.100	346.100	392.500	408.100	385.600	346.000
8	311.700	237.500	148.000	163.700	187.000	229.600	273.000	348.200	393.100	407.400	384.400	342.300
9	309.200	234.600	138.900	155.900	187.900	231.100	274.000	350.300	393.900	407.000	383.500	341.100
10	307.100	232.400	129.800	148.700	189.300	235.300	276.200	352.900	394.200	406.400	383.300	339.200
11	304.900	229.300	121.300	147.000	190.600	237.400	278.300	353.600	394.600	405.800	382.400	335.400
12	302.700	226.000	119.500	154.000	191.800	239.800	280.700	355.700	395.100	405.200	381.600	331.500
13	300.400	222.600	118.900	175.600	192.800	242.000	283.400	357.900	395.600	405.000	379.900	327.800
14	298.600	219.500	118.200	188.600	193.800	243.900	285.700	360.700	396.100	404.500	379.100	326.900
15	296.600	215.600	117.500	190.500	193.900	245.600	288.000	363.300	396.600	403.500	378.100	325.800
16	294.400	211.600	117.400	190.700	194.400	246.700	291.400	365.900	397.800	403.000	377.100	324.700
17	292.000	206.900	123.800	188.200	195.600	248.600	295.300	368.000	399.800	402.300	374.200	321.200
18	289.600	203.500	132.400	183.600	196.900	245.600	298.700	368.000	401.400	401.600	376.000	319.400
19	287.300	199.300	151.600	180.800	198.000	252.200	301.700	370.300	402.500	401.500	375.000	316.000
20	285.000	192.800	162.700	179.900	198.900	253.800	304.700	373.400	402.500	400.900	373.400	312.800
21	282.500	192.800	193.000	178.200	199.900	255.200	307.300	374.600	403.500	400.200	372.500	311.700
22	280.100	189.500	208.800	176.000	199.900	256.700	310.200	375.700	404.500	399.000	371.600	311.100
23	277.600	187.200	219.600	174.800	200.500	258.100	313.300	377.000	405.500	398.900	370.800	311.800
24	275.100	184.700	231.800	173.700	201.300	259.400	316.200	379.300	406.500	398.100	370.700	314.600
25	272.600	183.300	239.600	172.400	203.500	260.500	319.800	382.500	407.100	396.400	370.100	316.400
26	269.900	186.400	237.000	170.600	205.400	261.700	322.500	383.600	408.100	395.600	369.500	317.100
27	267.000	186.400	235.600	172.400	208.000	262.600	325.500	384.700	408.000	395.500	368.600	317.100
28	264.500	184.000	226.600	173.800	210.500	262.800	328.000	384.900	409.000	394.400	365.000	316.900
29	261.600	182.200	214.900	175.200	------	263.100	330.200	385.800	408.900	393.000	360.500	316.500
30	258.800	181.600	206.700	176.800	------	264.000	332.200	386.700	409.100	392.200	358.900	316.100
31	255.900	------	201.100	178.300	------	265.100	------	387.700	------	392.200	358.500	------
MAX	326.900	252.400	239.600	194.400	210.500	265.100	332.200	387.700	409.100	409.900	390.600	357.600
MIN	255.900	181.600	117.400	147.000	179.300	212.400	266.200	334.300	388.400	392.200	358.500	311.100
(†)	1,500.55	1,465.01	1,475.10	1,463.29	1,479.76	1,404.45	1,530.25	1,548.99	1,555.58	1,550.40	1,539.40	1,524.40
(‡)	-73,500	-74,300	+19,500	-22,800	+32,200	+54,600	+67,100	+55,500	+21,400	-16,900	-33,700	-42,400

CAL YR 1972 MAX 457.900 MIN 117.400 AC-FT‡ +64,700
WTR YR 1973 MAX 409.900 MIN 117.400 AC-FT‡ -13,300

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14181500 NORTH SANTIAM RIVER AT NIAGARA, OREG.

LOCATION.--Lat 44°45'10", long 122°17'50", in NE¼NE¼ sec.34, T.9 S., R.4 E., Marion County, on left bank 0.1 mi (0.2 km) downstream from Little Sardine Creek, 0.8 mi (1.3 km) downstream from Big Cliff Dam, 2.1 mi (3.4 km) east of Niagara, and at mile 57.3 (92.2 km).

DRAINAGE AREA.--453 mi² (1,173 km²).

PERIOD OF RECORD.--December 1908 to January 1920, October 1921 to March 1922, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as North Fork of Santiam River near Niagara prior to October 1913, and as "above Mayflower Creek, near Detroit" October 1938 to September 1952.

GAGE.--Water-stage recorder. Datum of gage is 1,093.78 ft (333.384 m) above mean sea level (Bureau of Public Roads bench mark). See WSP 1738 for history of changes prior to Oct. 1, 1952.

AVERAGE DISCHARGE.--45 years (1909-19, 1938-73), 2,341 ft³/s (66.3 m³/s), 70.18 in/yr (1,783 mm/yr), 1,696,000 acre-ft/yr (2.09 km³/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) Dec. 29, gage height, 7.84 ft (2.390 m); minimum, 505 ft³/s (14.3 m³/s) Apr. 11; minimum daily, 586 ft³/s (16.6 m³/s) Apr. 10, 11.

Period of record: Maximum discharge, 63,200 ft³/s (1,790 m³/s) Nov. 22, 1909, gage height, 16.4 ft (5.00 m), from floodmark, site and datum then in use, from rating curve extended above 35,000 ft³/s (991 m³/s); minimum, 19 ft³/s (0.54 m³/s) Aug. 21, 1963; minimum daily, 430 ft³/s (12.2 m³/s) Sept. 23-25, 1915.

REMARKS.--Records excellent. Flow regulated since 1953 by Detroit Lake (see station 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft (3.61 hm³). No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1288: 1914-18, 1920. WSP 1718: 1953-54.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,130	2,820	1,620	5,740	1,020	984	968	646	622	760	1,010	1,010
2	2,240	2,430	2,220	5,700	1,150	976	984	652	628	792	984	1,010
3	1,970	2,970	2,760	5,670	1,030	952	976	658	622	944	984	1,760
4	1,910	3,120	3,100	5,670	968	952	1,000	646	634	992	976	2,620
5	1,820	3,000	3,230	3,380	960	968	984	634	598	992	984	1,020
6	2,010	3,070	3,470	2,820	992	976	976	634	598	960	976	1,400
7	1,760	3,230	4,040	2,920	992	976	976	652	610	960	992	2,600
8	1,890	3,120	5,450	2,940	976	984	976	670	622	984	984	1,000
9	2,110	3,010	5,390	5,260	968	1,000	984	646	628	960	960	992
10	1,980	3,250	5,240	4,900	1,000	1,000	586	688	652	968	1,000	1,500
11	1,950	3,040	5,100	2,730	1,020	1,010	586	664	652	976	1,010	2,320
12	1,970	3,120	1,830	2,440	1,010	1,000	682	658	634	976	1,020	2,550
13	2,000	3,100	1,370	2,920	1,000	1,010	658	652	634	984	1,030	2,170
14	1,980	2,860	1,400	2,770	984	1,040	658	640	634	992	1,020	1,020
15	1,880	3,070	1,230	5,100	992	1,000	640	658	634	1,000	1,000	1,040
16	1,940	3,170	1,470	6,140	968	992	634	664	616	1,000	1,000	1,010
17	2,030	3,070	1,610	6,640	936	1,000	652	652	634	1,010	992	2,280
18	2,030	3,210	1,580	6,710	936	1,000	658	640	658	1,020	984	1,530
19	2,000	3,210	3,710	5,180	952	976	670	640	622	1,020	984	2,320
20	2,000	3,150	4,310	3,550	976	1,000	676	634	634	1,020	992	2,370
21	2,050	2,270	2,170	3,590	992	1,020	682	628	640	1,020	992	1,510
22	1,930	2,560	3,930	3,470	992	1,040	694	628	634	1,030	992	1,220
23	2,110	2,210	2,670	2,970	992	1,000	700	640	816	1,060	1,010	1,200
24	2,010	2,120	2,970	2,850	976	1,010	688	658	848	1,040	1,020	1,080
25	2,000	2,370	2,820	2,970	944	1,010	664	634	856	1,020	1,010	1,040
26	2,260	2,890	6,560	2,790	984	1,020	670	622	840	1,010	1,000	1,030
27	2,360	2,360	6,610	1,130	976	1,050	664	808	848	1,000	2,430	1,020
28	2,330	3,040	9,810	1,080	960	1,030	652	628	824	1,000	2,270	1,030
29	2,150	2,100	10,600	1,070	------	1,000	658	628	776	1,010	1,020	992
30	2,240	2,100	7,650	1,020	------	984	658	640	776	1,020	1,120	1,000
31	2,300	------	5,740	992	------	968	------	660	------	1,020	1,010	------
TOTAL	63,340	85,040	121,660	113,112	27,646	30,928	22,654	20,182	20,424	30,540	33,756	44,644
MEAN	2,043	2,835	3,925	3,649	987	998	755	651	681	985	1,089	1,488
MAX	2,360	3,250	10,600	6,710	1,150	1,050	1,000	808	856	1,060	2,430	2,620
MIN	1,760	2,100	1,230	992	936	952	586	622	598	760	960	992
AC-FT	125,600	168,700	241,300	224,400	54,840	61,350	44,930	40,030	40,510	60,580	66,960	88,550
MEAN†	847	1,586	4,242	3,279	1,567	1,887	1,882	1,554	1,040	710	541	776
CFSM†	1.87	3.50	9.36	7.24	3.46	4.16	4.15	3.43	2.30	1.57	1.19	1.71
IN.†	2.15	3.90	10.79	8.34	3.60	4.80	4.64	3.95	2.56	1.81	1.38	1.91
AC-FT†	52,100	94,400	260,800	201,600	87,040	116,000	112,000	95,530	61,910	43,680	33,260	46,150

CAL YR 1972 TOTAL 1,137,136 MEAN 3,107 MAX 12,300 MIN 586 AC-FT 2,256,000 MEAN† 3,196 CFSM† 7.06 IN.† 96.03 AC-FT† 2,320,000
WTR YR 1973 TOTAL 613,926 MEAN 1,682 MAX 10,600 MIN 586 AC-FT 1,218,000 MEAN† 1,663 CFSM† 3.67 IN.† 49.83 AC-FT† 1,205,000

† Adjusted for change in contents of Detroit Lake.

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OREG.

LOCATION.--Lat 44°47'30", long 122°34'40", in NW¼ sec.16, T.9 S., R.2 E., Marion County, on left bank 2.0 mi (3.2 km) east of Mehama and at mile 2.0 (3.2 km).

DRAINAGE AREA.--112 mi^2 (290 km^2) at cableway 1.2 mi (1.9 km) downstream where all discharge measurements are made.

PERIOD OF RECORD.--October 1931 to current year. Records for July to September 1924 and July to September 1931 at site 4 mi (6.4 km) upstream not equivalent owing to difference in drainage areas.

GAGE.--Water-stage recorder. Datum of gage is 655.41 ft (199.769 m) above mean sea level. Prior to June 12, 1948, nonrecording gage at about same site and datum.

AVERAGE DISCHARGE.--42 years, 772 ft^3/s (21.86 m^3/s), 93.60 in/yr (2,377 mm/yr), 559,300 acre-ft/yr (690 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 11,800 ft^3/s (334 m^3/s) Dec. 21, gage height, 11.09 ft (3.380 m); minimum, 28 ft^3/s (0.79 m^3/s) Sept. 17.

Period of record: Maximum discharge, 36,000 ft^3/s (1,020 m^3/s) Dec. 22, 1964, gage height, 16.73 ft (5.099 m), from rating curve extended above 17,000 ft^3/s (481 m^3/s); minimum, 13 ft^3/s (0.37 m^3/s) Aug. 30, 1961.

REMARKS.--Records fair. No regulation or diversion above station. Records herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 754: 1932. WSP 1218: 1934, 1936, 1949-50. WSP 1935: Maximum only, 1932-34, 1936, 1938, 1943, 1945-49, 1950(M,P), 1951-53(M), 1954(M,P), 1955(M), 1956(M,P), 1957(M), 1958-59(M,P). WSP 2135: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	79	355	879	452	975	604	404	199	257	50	36
2	80	483	460	911	433	983	581	391	186	229	48	34
3	73	538	527	793	420	807	549	400	175	202	46	33
4	68	1,290	411	677	425	700	559	429	165	186	46	32
5	62	1,270	351	615	429	621	632	379	153	173	44	30
6	59	650	311	530	433	549	621	350	144	160	44	31
7	55	469	269	462	395	496	535	362	137	151	43	51
8	52	527	280	425	362	457	471	452	131	142	43	59
9	51	501	260	408	337	452	447	530	126	133	41	42
10	58	710	250	370	362	1,250	447	683	120	124	42	38
11	62	549	240	654	404	1,080	452	564	114	118	41	34
12	54	407	230	3,040	391	826	461	486	112	110	39	32
13	50	339	220	6,850	366	754	481	491	120	104	38	31
14	48	293	220	3,100	345	677	447	520	112	98	36	30
15	46	251	210	1,840	341	615	404	491	124	96	35	30
16	45	218	210	1,820	330	621	540	433	232	94	34	29
17	44	194	2,600	1,680	437	654	1,040	379	924	89	35	28
18	43	192	2,730	1,340	461	598	846	337	807	84	35	32
19	42	218	4,780	1,100	420	660	793	305	544	79	34	36
20	40	209	3,650	938	383	649	774	266	408	79	33	74
21	41	194	6,830	892	354	609	722	238	319	79	32	429
22	42	180	3,500	767	330	587	905	216	272	80	32	358
23	40	170	2,920	671	312	570	931	216	238	77	32	711
24	39	160	3,300	705	308	544	793	412	213	71	68	1,620
25	38	351	2,480	774	501	540	728	530	341	68	92	1,360
26	45	2,980	1,690	649	604	515	748	400	722	63	53	632
27	49	1,220	2,400	570	700	491	741	326	564	62	43	400
28	76	710	2,210	510	626	466	615	286	420	62	40	283
29	84	516	1,590	476	------	429	515	257	337	60	38	222
30	71	415	1,250	481	------	457	447	235	290	52	36	183
31	62	------	1,050	496	------	604	------	216	------	51	38	------
TOTAL	1,706	16,283	47,784	35,423	11,661	20,236	18,829	11,984	8,749	3,433	1,311	6,940
MEAN	55.0	543	1,541	1,143	416	653	628	387	292	111	42.3	231
MAX	87	2,980	6,830	6,850	700	1,250	1,040	683	924	257	92	1,620
MIN	38	79	210	370	308	429	404	216	112	51	32	28
CFSM	.49	4.85	13.8	10.2	3.71	5.83	5.61	3.46	2.61	.99	.38	2.06
IN.	.57	5.41	15.87	11.77	3.87	6.72	6.25	3.98	2.91	1.14	.44	2.31
AC-FT	3,380	32,300	94,780	70,260	23,130	40,140	37,350	23,770	17,350	6,810	2,600	13,770

CAL YR 1972 TOTAL 360,445 MEAN 985 MAX 11,800 MIN 23 CFSM 8.79 IN 119.72 AC-FT 714,900
WTR YR 1973 TOTAL 184,339 MEAN 505 MAX 6,850 MIN 28 CFSM 4.51 IN 61.23 AC-FT 365,600

PEAK DISCHARGE (BASE, 8,200 CFS).--Dec. 21 (0300) 11,800 cfs (11.09 ft); Jan. 13 (0030) 10,900 cfs (10.84 ft).

14183000 NORTH SANTIAM RIVER AT MEHAMA, OREG.

LOCATION.--Lat 44°47'20", long 122°37'00", in NW¼ sec.18, T.9 S., R.2 E., Marion County, on right bank 300 ft (91 m) downstream from highway bridge at Mehama, 0.5 mi (0.8 km) downstream from Little North Santiam River, and at mile 38.71 (62.28 km).

DRAINAGE AREA.--655 mi² (1,696 km²), at cableway 0.8 mi (1.3 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to September 1914, September 1921 to current year. Monthly discharge only September 1921, published in WSP 1318. Prior to October 1913, published as North Fork of Santiam River at Mehama.

GAGE.--Water-stage recorder. Datum of gage is 602.49 ft (183.639 m) above mean sea level. Prior to June 15, 1933, nonrecording gage at site 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--57 years (1905-6, 1910-14, 1921-73), 3,353 ft³/s (95.0 m³/s) 2,429,000 acre-ft/yr (2.99 km³/yr).

EXTREMES.--Current year: Maximum discharge, 23,100 ft³/s (654 m³/s) Dec. 21 gage height, 9.28 ft (2.829 m); minimum, 738 ft³/s (20.9 m³/s) June 10; minimum daily, 787 ft³/s (22.3 m³/s) June 6-8, 13, 14.

Period of record: Maximum discharge, 76,600 ft³/s (2,170 m³/s) Dec. 28, 1945, gage height, 15.37 ft (4.685 m), from rating curve extended above 36,000 ft³/s (1,020 m³/s), on basis of slope-area measurement of peak flow; maximum gage height, 17.5 ft (5.33 m) Nov. 20, 1921, from graph based on gage readings, and Jan. 6, 1923, from floodmark, at site then in use; minimum discharge, 254 ft³/s (7.19 m³/s) Aug. 3, 1970; minimum daily, 420 ft³/s (11.9 m³/s) Sept. 18, 1924.

REMARKS.--Records excellent. Flow regulated since 1953 by Detroit Lake (see station 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft (3.61 hm³). No diversion above station. All records given herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 739: 1922-23(M). WSP 1044: 1943. WSP 1248: 1906, 1911-14, 1924(M), 1926, 1934-36(M), 1937, 1938(M), 1942(M). WSP 2135: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,130	2,480	2,090	6,810	1,680	2,310	1,910	1,200	882	1,040	1,040	1,030
2	2,190	3,090	2,480	6,900	1,650	2,280	1,890	1,170	874	1,030	1,020	1,030
3	1,960	3,340	3,320	6,600	1,760	2,070	1,810	1,180	856	1,100	1,010	1,600
4	1,860	4,420	3,520	6,480	1,560	1,930	1,810	1,210	838	1,180	1,010	2,440
5	1,780	4,330	3,540	4,330	1,550	1,820	1,860	1,140	812	1,160	1,010	1,340
6	1,930	3,680	3,720	3,760	1,560	1,740	1,850	1,100	787	1,120	1,010	1,210
7	1,660	3,660	3,960	3,560	1,530	1,670	1,730	1,140	787	1,110	1,010	2,610
8	1,850	3,640	5,580	3,440	1,470	1,620	1,650	1,250	787	1,120	1,010	1,230
9	2,000	3,520	5,600	5,450	1,440	1,620	1,620	1,300	804	1,090	993	1,040
10	1,920	4,000	5,430	5,630	1,500	2,560	1,300	1,520	804	1,080	1,020	1,220
11	1,860	3,600	5,350	3,620	1,550	2,440	1,200	1,360	804	1,090	1,020	2,270
12	1,920	3,500	2,440	7,080	1,550	2,120	1,310	1,260	804	1,090	1,030	2,390
13	1,890	3,400	1,680	14,500	1,500	2,060	1,310	1,250	787	1,080	1,040	2,340
14	1,960	3,110	1,550	7,260	1,470	1,990	1,250	1,260	787	1,080	1,030	1,180
15	1,760	3,200	1,430	7,740	1,460	1,880	1,190	1,220	804	1,080	1,030	1,080
16	1,860	3,280	1,590	8,690	1,430	1,880	1,370	1,170	900	1,080	1,010	1,020
17	1,910	3,150	4,880	9,150	1,520	1,960	1,960	1,110	1,700	1,080	1,010	1,960
18	1,920	3,300	5,280	8,550	1,540	1,880	1,810	1,050	1,620	1,080	1,000	1,700
19	1,880	3,340	10,400	6,930	1,500	2,000	1,840	1,010	1,260	1,090	1,000	2,090
20	1,960	3,260	9,440	5,010	1,470	1,990	1,790	974	1,110	1,090	993	2,440
21	1,960	2,470	13,700	4,860	1,460	1,950	1,710	937	1,010	1,090	993	2,020
22	1,790	2,580	9,150	4,420	1,430	1,930	1,910	909	965	1,100	1,000	1,640
23	2,090	2,340	7,320	4,020	1,410	1,860	1,930	919	1,030	1,110	1,000	2,000
24	1,910	2,210	8,400	3,860	1,400	1,810	1,740	1,180	1,080	1,110	1,090	3,130
25	1,930	2,660	6,750	4,070	1,650	1,780	1,650	1,280	1,250	1,070	1,090	2,730
26	2,100	6,780	7,800	3,780	1,810	1,730	1,640	1,120	1,610	1,060	1,040	1,820
27	2,230	3,880	10,600	2,160	1,910	1,740	1,620	1,200	1,440	1,040	2,130	1,560
28	2,330	3,840	13,300	1,850	1,790	1,720	1,470	993	1,290	1,040	2,310	1,440
29	2,140	2,730	13,100	1,780	------	1,640	1,340	956	1,120	1,050	1,220	1,320
30	2,130	2,750	10,200	1,770	------	1,660	1,260	937	1,100	1,050	1,110	1,300
31	2,260	------	7,080	1,730	------	1,860	------	919	------	1,050	1,070	------
TOTAL	61,070	101,540	190,680	165,790	43,550	59,500	48,730	35,224	30,702	33,640	34,349	52,180
MEAN	1,970	3,385	6,151	5,348	1,555	1,919	1,624	1,136	1,023	1,085	1,108	1,739
MAX	2,330	6,780	13,700	14,500	1,910	2,560	1,960	1,520	1,700	1,180	2,310	3,130
MIN	1,660	2,210	1,430	1,730	1,400	1,620	1,190	909	787	1,030	993	1,020
AC-FT	121,100	201,400	378,200	328,800	86,380	118,000	96,660	69,870	60,900	66,720	68,130	103,500

CAL YR 1972 TOTAL 1,654,820 MEAN 4,521 MAX 23,100 MIN 1,170 AC-FT 3,282,000
WTR YR 1973 TOTAL 856,955 MEAN 2,348 MAX 14,500 MIN 787 AC-FT 1,700,000

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OREG.

LOCATION.--Lat 44°23'35", long 122°30'35", in SE¼ sec.36, T.13 S., R.2 E., Linn County, on right bank 100 ft (30 m) downstream from bridge at Cascadia ranger station, 0.5 mi (0.8 km) downstream from Mouse Creek, 0.5 mi (0.8 km) upstream from Deer Creek, 1.5 mi (2.4 km) southwest of Cascadia, and at mile 48.5 (78.0 km).

DRAINAGE AREA.--174 mi^2 (451 km^2), at gaging cable 0.7 mi (1.1 km) upstream.

PERIOD OF RECORD.--September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 759.88 ft (231.611 m) above mean sea level. Prior to Nov. 1, 1935, nonrecording gage.

AVERAGE DISCHARGE.--38 years, 824 ft^3/s (23.3 m^3/s) 64.31 in/yr (1,633 mm/yr), 597,000 acre-ft/yr (736 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,680 ft^3/s (161 m^3/s) Dec. 21, gage height, 8.52 ft (2.597 m); minimum, 41 ft^3/s (1.16 m^3/s) Sept. 17.
Period of record: Maximum discharge, 27,600 ft^3/s (782 m^3/s) Dec. 22, 1964, gage height, 19.68 ft (5.998 m), from rating curve extended above 14,000 ft^3/s (396 m^3/s); minimum, 23 ft^3/s (0.65 m^3/s) Dec. 1, 2, 1936.

REMARKS.--Records excellent. No regulation or diversion above station. All records given herein are for measuring site. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	122	310	878	515	1.080	725	529	204	182	65	51
2	72	516	314	978	487	932	711	508	198	173	63	49
3	70	442	353	878	461	815	676	501	192	165	61	47
4	68	568	298	745	473	752	647	487	185	157	61	45
5	64	540	266	662	501	690	683	444	176	151	61	43
6	62	366	254	577	508	640	697	426	167	146	61	43
7	59	339	233	501	467	577	640	444	162	141	61	99
8	58	400	220	455	432	536	598	494	154	136	60	88
9	58	344	210	426	414	515	577	508	151	129	57	63
10	73	547	200	408	467	1.140	577	473	146	125	57	54
11	97	415	190	626	494	1.150	584	432	141	121	57	50
12	79	322	170	2.080	467	940	591	408	143	116	56	47
13	75	274	160	3.870	438	885	605	420	149	112	54	45
14	78	243	150	2.620	414	822	556	426	143	107	53	44
15	71	212	170	1.760	397	752	515	402	167	103	51	43
16	67	194	250	2.420	386	780	738	373	204	98	50	42
17	64	179	1.700	2.000	444	808	1.140	344	570	93	51	42
18	62	179	2.500	1.540	449	745	1.070	315	515	92	51	49
19	61	188	3.200	1.240	420	828	1.120	291	379	89	49	62
20	59	176	2.970	1.040	397	815	1.020	271	301	93	49	127
21	61	170	4.610	955	379	780	924	248	252	93	48	170
22	61	170	3.540	828	361	780	994	236	228	92	47	198
23	59	158	3.060	738	344	732	1.000	232	212	88	47	326
24	57	155	3.920	738	338	690	893	426	198	84	70	732
25	58	188	2.850	766	570	683	849	473	228	80	93	697
26	76	950	1.790	662	584	640	835	344	338	78	67	330
27	81	638	2.060	605	633	605	815	296	267	76	57	250
28	122	475	1.970	556	612	591	725	271	228	74	54	200
29	130	380	1.480	522	------	549	640	248	208	71	52	170
30	108	348	1.190	549	------	584	577	232	195	69	51	150
31	92	------	1.040	577	------	725	------	220	------	66	53	------
TOTAL	2.278	10.198	41.628	33.200	12.852	23.561	22.722	11.722	6.801	3.400	1.767	4.356
MEAN	73.5	340	1.343	1.071	459	760	757	378	227	110	57.0	145
MAX	130	950	4.610	3.870	633	1.150	1.140	529	570	182	93	732
MIN	57	122	150	408	338	515	515	220	141	66	47	42
CFSM	.42	1.95	7.72	6.16	2.64	4.37	4.35	2.17	1.30	.63	.33	.83
IN.	.49	2.18	8.90	7.10	2.75	5.04	4.86	2.51	1.45	.73	.38	.93
AC-FT	4.520	20.230	82.570	65.850	25.490	46.730	45.070	23.250	13.490	6.740	3.500	8.640

CAL YR 1972 TOTAL 386.850 MEAN 1.057 MAX 15.100 MIN 43 CFSM 6.07 IN 82.71 AC-FT 767.300
WTR YR 1973 TOTAL 174.485 MEAN 478 MAX 4.610 MIN 42 CFSM 2.75 IN 37.30 AC-FT 346.100

PEAK DISCHARGE (BASE, 5,700 CFS).--No peak above base.

14185800 MIDDLE SANTIAM RIVER NEAR CASCADIA, OREG.

LOCATION.--Lat 44°30'55", long 122°22'15", in NE¼ sec.19, T.12 S., R.4 E., Linn County, on right bank 5.6 mi (9.0 km) downstream from Bear Creek, 10 mi (16 km) northeast of Cascadia, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,040 ft (320 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 640 ft³/s (18.1 m³/s), 83.57 in/yr (2,123 mm/yr), 463,700 acre-ft/yr (572 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,870 ft³/s (166 m³/s) Dec. 21, gage height, 8.17 ft (2.490 m); minimum, 37 ft³/s (1.05 m³/s) Sept. 16, 17.

Period of record: Maximum discharge, 22,900 ft³/s (649 m³/s) Dec. 22, 1964, gage height, 15.75 ft (4.801 m), from floodmark, from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of slope-area measurement of peak flow; minimum, 33 ft³/s (0.93 m³/s) Sept. 28, 29, 1967.

REMARKS.--Records excellent except those for January, which are fair. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	129	238	695	396	855	488	472	213	205	72	46
2	64	357	260	690	385	810	460	456	203	190	71	44
3	61	323	278	612	378	710	440	456	193	178	69	43
4	59	480	235	536	417	640	456	444	185	168	68	42
5	56	540	213	496	460	592	516	403	175	161	68	41
6	54	341	210	448	476	544	536	389	168	153	67	40
7	53	305	190	403	436	500	492	406	163	147	67	69
8	51	364	180	250	403	468	456	484	157	141	65	60
9	50	305	160	311	385	472	456	496	153	138	64	48
10	60	456	150	311	432	1,240	464	484	149	132	62	45
11	74	347	140	588	452	968	476	432	143	129	61	43
12	61	270	130	2,020	424	785	492	410	145	125	60	41
13	59	240	125	3,820	396	715	520	420	147	122	59	40
14	59	213	120	2,350	378	648	484	432	141	116	57	39
15	56	183	116	1,430	368	604	448	410	153	113	56	39
16	53	163	223	1,960	354	632	715	371	228	109	55	38
17	51	149	1,850	1,660	417	620	992	338	500	105	54	38
18	50	147	1,860	1,310	406	580	800	311	413	102	53	42
19	49	151	3,280	1,040	385	608	740	288	320	100	53	65
20	48	140	2,980	872	361	568	695	268	273	104	51	123
21	49	134	4,110	765	344	544	665	248	243	100	51	203
22	49	129	2,970	665	332	536	765	235	225	98	50	208
23	47	123	2,710	604	320	508	780	238	210	95	50	532
24	47	118	2,880	620	320	500	725	385	195	91	85	878
25	48	185	2,190	616	448	512	700	420	248	88	85	800
26	59	962	1,540	540	484	496	725	320	417	85	62	406
27	57	520	1,890	496	548	472	720	283	311	83	55	280
28	86	375	1,620	460	552	440	640	265	265	80	50	223
29	81	308	1,200	440	------	410	568	248	238	78	48	185
30	74	265	968	440	------	440	512	235	220	77	46	163
31	67	------	810	428	------	512	------	223	------	74	46	------
TOTAL	1,800	8,722	35,826	27,876	11,457	18,929	17,926	11,270	6,794	3,687	1,860	4,866
MEAN	58.1	291	1,156	899	409	611	598	364	226	119	60.0	162
MAX	86	962	4,110	3,820	552	1,240	992	496	500	205	85	878
MIN	47	118	116	250	320	410	440	223	141	74	46	38
CFSM	.56	2.80	11.1	8.64	3.93	5.88	5.75	3.50	2.17	1.14	.58	1.56
IN.	.64	3.12	12.81	9.97	4.10	6.77	6.41	4.03	2.43	1.32	.67	1.74
AC-FT	3,570	17,300	71,060	55,290	22,720	37,550	35,560	22,350	13,480	7,310	3,690	9,650

CAL YR 1972 TOTAL 303,841 MEAN 830 MAX 9,600 MIN 42 CFSM 7.98 IN 108.68 AC-FT 602,700
WTR YR 1973 TOTAL 151,011 MEAN 414 MAX 4,110 MIN 38 CFSM 3.98 IN 54.02 AC-FT 299,500

PEAK DISCHARGE (BASE, 4,500 CFS).--Dec. 21 (0030) 5,870 cfs (8.17 ft).

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OREG.

LOCATION.--Lat 44°32'25", long 122°26'05", in NW¼ sec.10, T.12 S., R.3 E., Linn County, on Bureau of Land Management land, on right bank 80 ft (24 m) downstream from Panther Creek, 10 mi (16 km) north of Cascadia, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--99.2 mi² (256.9 km²).

PERIOD OF RECORD.--August 1963 to November 1964 (destroyed by flood of December 1964); October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,050 ft (320 m), from topographic map. Aug. 13, 1963, to Dec. 22, 1964, water-stage recorder on left bank at present datum.

AVERAGE DISCHARGE.--9 years (1963-64, 1965-73), 668 ft³/s (18.92 m³/s), 91.45 in/yr (2,323 mm/yr), 484,000 acre-ft/yr (597 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,430 ft³/s (267 m³/s) Dec. 21 , gage height, 12.37 ft (3.770 m); minimum, 14 ft³/s (0.40 m³/s) Aug. 19-23.

Period of record: Maximum discharge, 22,400 ft³/s (6.34 m³/s) Jan. 20, 1972, gage height, 16.38 ft (4.993 m); minimum, 14 ft³/s (0.40 m³/s) Aug. 19-23, 1973.

Maximum discharge, 36,500 ft³/s (1,030 m³/s) Dec. 22, 1964, from slope-area measurement of peak flow.

REMARKS.--Records fair. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	146	277	685	465	1,060	506	323	165	165	26	35
2	57	610	298	700	443	976	483	302	165	148	25	34
3	54	860	352	635	443	784	447	298	165	137	23	33
4	50	1,190	248	533	515	670	456	291	151	129	23	31
5	47	1,070	266	476	573	582	519	261	122	124	23	30
6	44	560	228	416	560	506	515	252	113	115	23	38
7	43	506	190	368	497	443	447	249	105	109	23	44
8	42	596	180	326	443	404	388	284	101	103	22	46
9	40	551	165	310	404	388	376	298	101	99	22	35
10	42	1,070	155	295	506	1,450	376	305	99	95	19	31
11	49	640	165	695	537	1,020	380	284	93	91	17	30
12	46	404	135	3,560	483	736	376	264	89	86	17	31
13	42	323	130	6,560	434	640	396	261	91	84	16	33
14	42	267	126	3,200	404	569	364	261	91	80	15	34
15	39	225	122	1,740	388	515	326	249	91	78	15	35
16	38	195	340	1,890	376	560	564	225	148	75	15	38
17	35	170	3,770	1,660	447	591	958	201	474	71	15	39
18	33	165	3,170	1,290	438	528	784	183	483	70	15	46
19	31	216	5,430	1,050	400	587	736	170	319	70	14	71
20	30	195	3,370	862	364	555	665	165	237	70	14	168
21	29	183	6,170	748	340	501	630	158	195	70	14	384
22	29	173	3,950	645	319	492	742	142	170	70	14	316
23	28	163	3,260	569	295	470	724	144	153	68	14	974
24	28	153	3,670	690	291	452	620	368	144	77	40	1,830
25	28	295	2,660	838	510	465	560	388	168	120	82	1,280
26	29	1,920	1,660	640	555	443	560	274	364	105	53	587
27	29	844	2,470	551	630	404	542	225	316	53	44	398
28	57	542	1,980	488	582	376	456	198	252	26	40	302
29	65	400	1,290	452	------	348	384	180	213	26	38	252
30	54	326	988	492	------	376	352	175	178	26	37	219
31	46	------	820	537	------	506	------	165	------	26	37	------
TOTAL	1,286	14,758	48,035	33,899	12,642	18,397	15,632	7,543	5,556	2,666	795	7,408
MEAN	41.5	492	1,550	1,094	452	593	521	243	185	86.0	25.6	247
MAX	65	1,920	6,170	6,560	630	1,450	958	388	483	165	82	1,830
MIN	28	146	122	295	291	348	326	142	89	26	14	30
CFSM	.42	4.96	15.6	11.0	4.56	5.98	5.25	2.45	1.86	.87	.26	2.49
IN.	.48	5.53	18.01	12.71	4.74	6.90	5.86	2.83	2.08	1.00	.30	2.78
AC-FT	2,550	29,270	95,280	67,240	25,080	36,490	31,010	14,960	11,020	5,290	1,580	14,690

CAL YR 1972 TOTAL 320,262 MEAN 875 MAX 14,900 MIN 25 CFSM 8.82 IN 120.10 AC-FT 635,200
WTR YR 1973 TOTAL 168,617 MEAN 462 MAX 6,560 MIN 14 CFSM 4.66 IN 63.23 AC-FT 334,500

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-17	1600	10.80	5,900	1-12	2230	12.10	8,730
12-21	0100	12.37	9,430				

14186100 GREEN PETER LAKE NEAR FOSTER, OREG.

LOCATION.--Lat 44°27'10", long 122°32'40", in NE¼SE¼ sec.10, T.13 S., R.2 E., Linn County, in Green Peter Dam on Middle Santiam River 7.0 mi (11.3 km) northeast of Foster and at mile 5.7 (9.2 km).

DRAINAGE AREA.--273 mi^2 (707 km^2).

PERIOD OF RECORD.--October 1966 to current year. Prior to October 1971, published as Green Peter Reservoir near Foster.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 398,200 acre-ft (491 hm^3) May 31, elevation, 1,006.74 ft (306.854 m); minimum, 116,900 acre-ft (144 hm^3) Dec. 15, elevation, 899.20 ft (274.076 m).
Period of record: Maximum contents, 415,300 acre-ft (512 hm^3) June 25, 1969, elevation, 1,011.53 ft (308.314 m); minimum, 116,900 acre-ft (144 hm^3) Dec. 15, 1968, elevation, 899.20 ft (274.076 m).

REMARKS.--Reservoir is formed by concrete, gravity-type dam with ogee spillway completed in 1966 by Corps of Engineers; controlled storage began Oct. 6, 1966. Total capacity, 428,100 acre-ft (528 hm^3) and usable capacity 330,800 acre-ft (408 hm^3) between elevations 887.0 ft (270.36 m), proposed lower limit of operation, and 1,015.0 ft (309.37 m), top of spillway gates. Reservoir used for flood control, power development, improvement of navigation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-feet)

899	116,600	960	251,100
900	118,300	980	309,700
920	115,700	1,000	374,800
940	199,900	1,012	417,100

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268.300	225.700	176.700	209.600	188.500	227.300	313.300	376.300	398.100	377.200	363.700	306.600
2	266.200	225.200	175.300	204.900	188.400	230.800	315.700	376.900	398.100	397.000	362.300	304.500
3	263.000	224.900	172.300	201.400	189.700	233.900	317.800	377.500	398.100	397.000	360.800	302.400
4	261.900	225.200	168.600	197.000	191.500	237.400	320.000	378.000	398.000	396.500	359.200	300.300
5	260.700	225.600	165.200	188.600	193.300	234.000	322.400	379.300	397.700	396.100	357.900	298.100
6	259.300	224.400	163.100	187.100	194.900	242.300	326.400	380.600	397.400	395.900	356.300	296.500
7	258.100	222.500	159.500	178.400	196.500	244.400	328.300	381.000	397.200	395.400	354.700	294.900
8	257.000	221.200	151.900	171.900	197.700	246.300	328.700	381.800	396.900	394.900	353.200	293.000
9	256.100	219.700	144.800	168.100	198.500	250.600	330.500	383.500	396.500	394.300	351.500	291.600
10	255.100	219.300	137.700	164.800	199.900	255.300	332.300	385.100	396.100	393.500	349.800	290.000
11	254.000	217.900	130.700	164.800	202.000	259.800	334.200	386.100	393.700	392.600	348.200	289.100
12	252.900	216.000	123.800	175.200	203.400	263.500	336.000	387.500	390.800	391.900	346.700	288.200
13	251.500	213.100	119.200	193.300	204.500	266.900	337.600	388.800	389.400	390.900	344.900	287.100
14	251.100	209.600	118.100	200.000	205.800	269.900	339.400	389.400	388.800	389.800	343.300	285.000
15	250.900	206.000	116.900	199.600	206.900	272.500	341.300	389.700	388.300	388.800	341.600	283.000
16	249.600	202.300	117.800	199.900	208.100	275.500	344.100	390.000	388.400	387.300	339.500	280.500
17	248.300	198.300	131.100	199.000	209.400	278.400	348.800	390.700	390.800	385.800	337.400	279.500
18	246.900	194.500	141.800	196.600	210.700	281.100	351.700	391.400	392.500	384.300	335.300	278.200
19	245.600	191.200	161.300	194.000	211.900	284.100	354.200	391.900	393.600	382.700	333.200	277.600
20	244.200	187.400	171.400	192.400	212.800	286.900	356.000	392.200	394.000	381.200	331.100	277.200
21	243.000	184.200	193.500	191.100	213.600	289.500	358.500	392.400	394.300	379.600	329.000	277.200
22	241.900	180.600	203.000	189.300	214.000	292.100	361.000	392.400	394.500	378.000	326.800	277.400
23	241.000	179.400	213.000	187.200	214.700	294.500	363.400	392.800	394.400	376.400	324.700	279.500
24	239.700	178.000	225.000	185.500	215.600	296.900	365.400	394.000	394.300	374.800	323.400	285.100
25	238.500	177.300	233.300	184.200	217.100	298.900	367.200	395.600	394.800	373.200	321.600	289.200
26	236.600	181.700	232.800	182.600	218.700	301.000	369.000	396.600	396.300	371.600	319.100	291.100
27	235.000	182.700	231.700	183.200	221.100	303.100	370.700	397.500	397.200	369.900	317.100	292.200
28	233.800	181.100	230.200	183.300	223.100	305.100	372.900	397.900	397.500	368.700	315.300	290.600
29	232.600	179.800	223.900	181.300	------	305.900	374.800	398.000	397.700	367.500	313.700	290.600
30	231.100	177.900	219.100	185.300	------	307.900	375.600	398.100	397.300	366.200	310.700	290.400
31	229.000	------	214.500	187.500	------	311.000	------	398.200	------	364.700	308.500	------
MAX	268.300	225.700	233.300	209.600	223.100	311.000	375.600	398.200	398.100	397.000	363.700	306.600
MIN	229.000	177.300	116.900	164.800	188.400	227.300	313.300	376.300	388.300	364.700	308.500	277.200
(†)	951.71	930.41	965.99	936.67	949.43	980.40	1,000.25	1,006.74	1,006.50	997.02	979.60	973.65
(‡)	-39,300	-51,100	+36,600	-27,000	+35,600	+87,900	+64,600	+22,600	-900	-32,600	-56,200	-18,100

CAL YR 1972 MAX 411.500 MIN 116.900 AC-FT‡ +56,700
WTR YR 1973 MAX 398.200 MIN 116.900 AC-FT‡ +22,100

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14186600 FOSTER LAKE AT FOSTER, OREG.

LOCATION.--Lat 44°25'00", long 122°40'25", in NW¼NE¼ sec.27, T.13 S., R.1 E., Linn County, in Foster Dam on South Santiam River, 0.3 mi (0.5 km) above Wiley Creek, 0.5 mi (0.8 km) north of Foster, and at mile 37.7 (60.7 km).

DRAINAGE AREA.--492 mi² (1,274 km²).

PERIOD OF RECORD.--December 1966 to current year. Prior to October 1971, published as Foster Reservoir at Foster.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 56,980 acre-ft (70.3 hm³) Sept. 28, elevation, 637.92 ft (194.438 m); minimum, 30,930 acre-ft (38.1 hm³) Jan. 4, elevation, 612.85 ft (186.607 m).
Period of record: Maximum contents, 60,090 acre-ft (74.1 hm³) Sept. 17, 1968, elevation, 640.45 ft (195.209 m); minimum, 26,590 acre-ft (32.8 hm³) Nov. 15, 16, 1972, elevation, 607.85 ft (185.273 m).

REMARKS.--Reservoir is formed by rockfill embankment with an impervious core and ogee spillway completed in 1966 by Corps of Engineers; controlled storage began in November 1966. Total capacity, 60,780 acre-ft (74.9 hm³) and usable capacity 33,210 acre-ft (40.9 hm³) between elevations 609.0 ft (185.52 m), proposed lower limit of operation, and 641.0 ft (195.38 m), top of spillway gates . Reservoir used for reregulation of water released from Green Peter Reservoir, flood control, power development, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

Capacity table (elevation, in feet, and total contents, in acre-ft)

607	25,880	630	47,860
610	28,430	635	53,510
615	32,870	640	59,530
620	37,570	641	60,780
625	42,550		

CONTENTS. IN ACRE-FEET. AT 2400. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.510	39.940	31.780	31.100	33.280	36.320	48.150	54.930	55.780	56.070	56.210	55.990
2	55.560	39.140	31.970	31.140	34.600	37.020	48.460	55.120	55.750	56.060	56.210	55.810
3	55.730	38.250	32.000	31.970	34.690	37.430	48.660	55.360	55.690	56.110	56.290	55.640
4	55.890	37.860	32.260	30.930	34.870	37.710	48.770	55.520	55.620	56.000	56.290	55.490
5	56.020	37.150	31.970	31.080	35.040	37.870	48.900	55.340	55.680	55.950	56.200	55.460
6	56.110	35.960	31.430	31.100	35.220	37.930	49.130	55.240	55.720	56.100	56.190	55.330
7	56.150	35.680	31.000	31.080	35.270	37.870	49.160	55.840	55.730	56.140	56.150	55.520
8	56.170	35.250	31.560	31.120	35.400	37.690	49.140	56.260	55.750	55.980	56.150	55.630
9	56.240	34.660	31.530	32.400	35.350	37.520	49.140	55.890	55.750	56.040	56.210	55.640
10	56.320	32.870	31.510	33.510	35.440	38.730	49.160	55.850	55.700	56.140	56.320	55.600
11	56.370	33.380	31.550	32.150	35.590	39.890	49.210	55.820	55.830	56.320	56.380	55.570
12	56.330	32.560	31.520	31.970	35.680	40.650	49.290	55.570	55.970	56.160	56.410	55.520
13	56.260	32.430	31.760	31.480	35.740	41.330	49.460	55.410	56.040	56.340	56.450	55.420
14	55.680	31.740	31.170	31.240	35.550	41.880	49.510	55.920	56.060	56.450	56.450	55.040
15	55.130	32.020	31.430	31.300	35.350	42.200	49.500	55.990	56.090	56.170	56.450	54.630
16	55.280	32.200	31.430	31.330	35.160	42.650	49.810	55.910	56.220	56.380	56.400	54.220
17	55.620	32.030	32.440	31.230	35.090	43.170	50.930	55.770	56.200	56.300	56.380	54.170
18	55.980	31.900	31.860	31.170	35.000	43.420	51.780	55.630	56.200	56.330	56.450	54.100
19	56.140	31.580	32.160	31.510	34.860	44.040	52.250	55.570	55.900	56.170	56.220	54.200
20	54.060	31.640	32.000	32.010	34.820	44.620	52.580	55.500	56.000	56.170	56.190	54.390
21	51.560	31.670	31.000	31.280	34.750	45.120	53.110	55.520	55.940	56.170	56.140	55.100
22	48.850	31.740	31.120	31.660	34.670	45.570	53.410	55.560	55.870	56.100	56.130	55.520
23	46.180	31.570	31.170	33.800	34.690	46.010	53.780	55.650	56.020	56.180	56.150	56.190
24	43.690	31.780	31.210	34.260	34.560	46.230	53.800	56.080	55.950	56.100	56.290	56.240
25	42.550	31.740	31.050	34.610	34.810	46.290	53.940	56.150	56.090	56.070	56.460	56.330
26	42.540	31.860	31.070	34.540	35.170	46.380	54.100	55.870	56.040	56.070	56.550	56.040
27	41.950	31.840	31.420	33.150	35.130	46.390	54.390	55.780	56.110	56.290	56.610	55.520
28	41.300	31.780	31.110	32.760	35.400	46.380	54.270	55.620	55.800	56.230	56.470	56.980
29	40.900	31.030	31.100	32.920	------	47.440	54.270	55.730	55.920	56.150	55.400	56.710
30	40.400	32.040	31.100	32.970	------	47.550	54.680	55.750	56.110	56.150	56.290	56.790
31	39.960	------	31.070	32.750	------	47.860	------	55.790	------	56.230	56.110	------
MAX	56.370	39.940	32.440	34.610	35.740	47.860	54.680	56.260	56.220	56.450	56.610	56.980
MIN	39.960	31.030	31.000	30.930	33.280	36.320	48.150	54.930	55.620	55.950	55.400	54.100
(†)	622.44	614.08	613.00	614.86	617.72	630.00	636.00	636.93	637.20	637.30	637.20	637.76
(‡)	-15,140	-7,920	-970	+1,680	+2,650	+12,460	+6,820	+1,110	+320	+120	-120	+680

CAL YR 1972 MAX 56.890 MIN 31.000 AC-FT‡ -130
WTR YR 1973 MAX 56.980 MIN 30.930 AC-FT‡ +1,690

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

14186700 SOUTH SANTIAM RIVER AT FOSTER, OREG.

LOCATION.--Lat 44°24'50", long 122°40'25", in NE¼NW¼ sec.27, T.13 S., R.1 E., Linn County, on left bank 600 ft (183 m) upstream from Wiley Creek, 0.15 mi (0.24 km) below Foster Lake, 0.5 mi (0.8 km) north of the town of Foster, and at river mile 37.5 (60.3 km).

DRAINAGE AREA.--493 mi^2 (1,277 km^2).

PERIOD OF RECORD.--October 1966 to July 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 521.46 ft (158.941 m) above mean sea level (levels by Corps of Engineers). Prior to June 16, 1971, at site 300 ft (91 m) downstream at same datum.

AVERAGE DISCHARGE.--6 years (1966-72), 2,847 ft^3/s (80.63 m^3/s), 2,063,000 acre-ft/yr (2.54 km^3/yr).

EXTREMES.--Current year: Maximum discharge during period October 1972 to July 1973, 11,300 ft^3/s (320 m^3/s) Jan. 13, gage height, 9.09 ft (2.771 m); minimum discharge recorded, 526 ft^3/s (14.90 m^3/s) June 14.

Period of record: Maximum discharge, 18,100 ft^3/s (513 m^3/s) Nov. 29, 1971, gage height, 10.70 ft (3.261 m); maximum gage height, 11.69 ft (3.563 m) Jan. 21, 1972 (backwater from Wiley Creek); minimum discharge, 21 ft^3/s (0.59 m^3/s) Dec. 27, 28, 1966.

REMARKS.--Records excellent. Flow regulated since 1966 by Green Peter Lake (see station 14186100) and Foster Lake (see station 14186600). Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,200	2,280	1,610	5,960	861	798	807	1,020	639	687		
2	1,180	2,330	1,790	5,960	834	789	807	1,040	647	687		
3	746	2,350	2,950	4,480	798	789	807	1,010	647	687		
4	746	2,570	2,900	5,350	789	789	807	1,000	647	687		
5	746	2,760	2,970	5,530	789	798	798	679	639	687		
6	755	2,830	2,190	5,450	789	789	798	655	655	679		
7	763	2,630	2,830	5,350	789	780	798	789	647	695		
8	755	2,630	4,390	5,130	789	780	789	888	639	695		
9	755	2,610	4,670	2,950	789	789	746	852	639	687		
10	780	2,760	4,590	2,570	789	789	721	655	647	738		
11	789	2,910	4,610	3,070	789	780	712	772	1,630	798		
12	807	2,740	4,590	4,610	789	780	704	687	1,980	843		
13	816	2,680	3,150	8,820	798	789	695	679	1,170	843		
14	738	3,140	1,330	7,230	798	780	687	755	729	933		
15	721	2,590	942	7,100	798	798	679	970	755	930		
16	729	2,610	671	8,260	798	807	729	1,010	738	1,020		
17	738	2,830	2,800	7,700	798	807	798	671	763	1,130		
18	738	2,800	3,680	6,900	798	807	1,350	647	721	1,130		
19	746	2,680	4,520	6,210	789	798	1,680	647	687	1,110		
20	1,780	2,560	6,820	3,880	807	798	1,640	647	687	1,080		
21	2,090	2,490	7,440	4,400	798	798	1,390	647	687	1,080		
22	2,180	2,490	8,200	3,570	798	798	1,500	647	687	1,070		
23	2,180	1,380	6,540	2,460	798	798	1,590	647	679	1,070		
24	2,130	1,150	7,770	3,340	807	789	1,590	647	687	1,060		
25	1,440	1,260	6,330	3,340	807	798	1,440	647	679	1,060		
26	1,200	2,070	7,140	3,310	807	798	1,430	647	687	1,040		
27	1,310	1,840	9,350	2,540	789	825	1,270	647	679	1,000		
28	1,380	2,590	9,350	1,840	789	780	980	639	679	940		
29	1,350	2,490	9,260	1,550	------	738	834	639	687	880		
30	1,320	1,600	7,120	897	------	738	1,000	639	687	860		
31	1,600	------	6,270	879	------	780	------	639	------	850		
TOTAL	35,208	72,650	148,773	140,636	22,371	24,474	30,576	23,158	23,144	27,656		------
MEAN	1,136	2,422	4,799	4,537	799	789	1,019	747	771	892		
MAX	2,180	3,140	9,350	8,820	861	825	1,680	1,040	1,980	1,130		
MIN	721	1,150	671	879	789	738	679	639	639	679		
AC-FT	69,840	144,100	295,100	279,000	44,370	48,540	60,650	45,930	45,910	54,860		

CAL YR 1972 TOTAL 1,289,039 MEAN 3,522 MAX 17,000 MIN 410 AC-FT 2,557,000

14187000 WILEY CREEK NEAR FOSTER, OREG.

LOCATION.--Lat 44°22'20", long 122°37'20", in NE¼NE¼ sec.12, T.14 S., R.1 E., Linn County, on right bank 0.5 mi (0.8 km) downstream from Little Wiley Creek, 3.5 mi (5.6 km) southeast of Foster, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--51.8 mi^2 (134.2 km^2).

PERIOD OF RECORD.--October 1947 to July 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 716.08 ft (218.261 m) above mean sea level (Corps of Engineers bench mark). Prior to Apr. 6, 1965, water-stage recorder at present site at datum 2.00 ft (0.670 m) higher. Apr. 6 to Aug. 17, 1965, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--25 years (1948-72), 224 ft^3/s (6.344 m^3/s), 58.72 in/yr (1,491 mm/yr), 162,300 acre-ft/yr (200 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,340 ft^3/s (37.9 m^3/s) Dec. 23, gage height, 4.51 ft (1.375 m); minimum recorded, 11 ft^3/s (0.31 m^3/s) Oct. 7-9.

Period of record: Maximum discharge, 9,640 ft^3/s (273 m^3/s) Jan. 21, 1972, gage height, 9.28 ft (2.829 m), from rating curve extended above 3,700 ft^3/s (105 m^3/s); maximum gage height, 11.80 ft (3.597 m), present datum, Dec. 21, 1964 (backwater from debris); minimum discharge, 5.6 ft^3/s (0.16 m^3/s) Nov. 26, 1952.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS.--WSP 2135: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	23	74	253	165	253	242	100	36	34		
2	14	72	82	297	145	238	238	94	35	32		
3	14	94	92	235	133	210	234	90	34	29		
4	13	118	77	221	135	195	195	88	34	28		
5	12	107	65	195	135	180	183	80	31	28		
6	12	75	62	168	133	180	171	75	29	27		
7	11	86	55	145	123	162	153	79	28	26		
8	11	107	52	130	114	145	138	88	28	25		
9	11	90	50	120	109	140	128	84	28	24		
10	17	180	48	120	125	297	118	77	26	23		
11	21	116	55	235	123	289	111	68	26	20		
12	16	82	65	705	118	238	104	64	28	21		
13	15	68	75	991	107	228	109	59	30	21		
14	15	58	100	675	100	207	96	55	31	20		
15	14	48	140	481	92	186	86	52	39	20		
16	13	43	245	695	88	195	159	48	55	19		
17	12	38	620	590	100	204	277	45	145	19		
18	12	44	580	468	100	195	289	44	111	18		
19	12	59	725	377	92	249	325	43	75	18		
20	12	49	625	321	84	253	313	40	59	19		
21	12	48	844	289	79	238	285	39	50	20		
22	12	46	898	242	75	231	277	38	45	19		
23	12	43	874	207	72	210	257	42	43	18		
24	11	42	1,080	235	70	195	224	90	39	17		
25	12	45	754	242	140	183	195	80	52	17		
26	17	192	513	201	125	165	171	61	65	16		
27	16	165	590	180	135	162	153	53	48	16		
28	30	125	558	159	133	162	138	49	42	15		
29	29	102	425	153	------	145	123	44	37	15		
30	21	84	349	183	------	168	111	40	35	14		
31	18	------	301	192	------	221	------	38	------	14		------
TOTAL	461	2,449	11,073	9,705	3,150	6,324	5,603	1,947	1,364	652		
MEAN	14.9	81.6	357	313	113	204	187	62.8	45.5	21.0		
MAX	30	192	1,080	991	165	297	325	100	145	34		
MIN	11	23	48	120	70	140	86	38	26	14		
AC-FT	914	4,860	21,960	19,250	6,250	12,540	11,110	3,860	2,710	1,290		

CAL YR 1972 TOTAL 95,665.8 MEAN 261 MAX 4,240 MIN 7.4 AC-FT 189,800

PEAK DISCHARGE (BASE, 2,300 CFS).-- No peak above base.

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OREG.

LOCATION.--Lat 44°24'45", long 122°41'15", in SE¼NE¼ sec.28, T.13 S., R.1 E., Linn County, on left bank 0.6 mi (1.0 km) downstream from Wiley Creek and at mile 37.0 (59.5 km).

DRAINAGE AREA.--537 mi^2 (1,391 km^2).

PERIOD OF RECORD.--August 1973 to current year. Records for October 1966 to July 1973 (published as South Santiam River at Foster, station 14186700) at site 0.5 mi (0.8 km) upstream not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m), from topographic map.

EXTREMES.--August to September 1973: Maximum discharge during period, 1,330 ft^3/s (37.7 m^3/s) Sept. 14, gage height, 10.44 ft (3.182 m); minimum, 598 ft^3/s (16.9 m^3/s) Aug. 1, Sept. 19.

REMARKS.--Records excellent. Flow regulated since 1966 by Green Peter Lake (see station 14186100) and by Foster Lake (see station 14186600). Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											809	1,180
2											828	1,190
3											829	1,180
4											930	1,170
5											939	1,140
6											939	1,020
7											944	961
8											932	951
9											927	949
10											925	947
11											927	640
12											928	632
13											945	674
14											938	1,310
15											944	1,310
16											1,150	1,310
17											1,150	687
18											1,150	792
19											1,140	640
20											1,140	631
21											1,140	633
22											1,130	640
23											1,110	656
24											1,120	812
25											1,120	850
26											1,120	659
27											1,120	641
28											1,170	906
29					------						1,190	637
30					------						1,190	626
31		------			------		------		------		1,190	------
TOTAL											32,014	26,374
MEAN											1,033	879
MAX											1,190	1,310
MIN											809	626
AC-FT											63,500	52,310

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OREG.

LOCATION.--Lat 44°29'55", long 122°49'20", in SW¼NW¼ sec.28, T.12 S., R.1 W., Linn County, on left bank 0.1 mi (0.2 km) downstream from highway bridge at Waterloo, 2.1 mi (3.4 km) upstream from Hamilton Creek, and at mile 23.3 (37.5 km).

DRAINAGE AREA.--640 mi^2 (1,658 km^2).

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to December 1911 (gage heights only January to December 1911), July 23 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as South Fork of Santiam River at Waterloo 1905-7, 1910-11.

GAGE.--Water-stage recorder. Datum of gage is 370.39 ft (112.895 m) above mean sea level. Prior to Dec. 31, 1911, nonrecording gage at site 0.5 mi (0.8 km) downstream at datum about 5.0 ft (1.52 m) lower. July 1, 1923, to Nov. 12, 1934, nonrecording gage, at present site and datum.

AVERAGE DISCHARGE.--51 years (1905-6, 1923-73), 2,916 ft^3/s (82.6 m^3/s), 2,113,000 acre-ft/yr (2.61 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 11,300 ft^3/s (320 m^3/s) Jan. 13, gage height, 7.87 ft (2.399 m); minimum, 555 ft^3/s (15.7 m^3/s) Aug. 1.

Period of record: Maximum discharge, 95,200 ft^3/s (2,696 m^3/s) Dec. 22, 1964, gage height, 24.50 ft (7.468 m); minimum, 61 ft^3/s (1.73 m^3/s) Oct. 12, 1966.

REMARKS.--Records good. Flow regulated since October 1966 by Green Peter Lake (see station 14186100) and since December 1966 by Foster Lake (see station 14186600). No diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1248: 1907, 1924-30, 1932.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.300	2.120	1.790	6.200	1.280	1.330	1.390	1.240	674	674	770	1.290
2	1.260	2.580	1.940	6.250	1.230	1.340	1.390	1.230	674	655	800	1.300
3	850	2.530	2.990	4.910	1.160	1.300	1.330	1.210	674	645	800	1.300
4	770	2.770	3.010	5.870	1.140	1.270	1.270	1.200	664	655	890	1.300
5	760	2.920	3.160	5.630	1.130	1.230	1.230	930	664	645	920	1.270
6	760	2.980	2.450	5.680	1.120	1.240	1.180	800	664	645	910	1.170
7	770	2.770	2.670	5.530	1.090	1.200	1.160	890	664	645	920	1.070
8	770	2.810	4.200	5.310	1.070	1.160	1.130	1.040	655	636	910	1.060
9	770	2.790	4.560	3.520	1.060	1.150	1.050	1.070	664	627	910	1.050
10	800	2.960	4.520	2.920	1.080	1.380	1.010	810	655	664	920	1.060
11	820	3.090	4.480	3.520	1.080	1.410	973	870	1.340	712	920	721
12	830	2.910	4.540	5.060	1.080	1.330	951	820	1.940	780	910	627
13	840	2.790	3.450	9.560	1.060	1.320	940	770	1.410	770	910	627
14	780	3.150	1.840	7.880	1.050	1.270	910	800	731	840	920	1.390
15	750	2.770	1.140	7.600	1.040	1.260	890	1.020	760	860	930	1.530
16	750	2.690	920	8.630	1.030	1.270	951	1.120	760	900	1.120	1.530
17	750	2.910	3.130	8.350	1.060	1.330	1.230	820	890	1.080	1.170	890
18	760	2.890	4.730	7.440	1.070	1.280	1.750	702	860	1.120	1.160	820
19	760	2.820	5.480	6.840	1.050	1.470	2.180	693	750	1.070	1.160	721
20	1.590	2.670	6.820	4.480	1.040	1.480	2.240	683	721	1.050	1.160	645
21	2.150	2.620	8.660	4.840	1.030	1.420	1.930	683	712	1.050	1.160	645
22	2.230	2.610	8.410	4.160	1.020	1.390	1.960	683	702	1.050	1.170	674
23	2.230	1.710	7.440	2.960	1.020	1.320	2.050	693	702	1.050	1.150	702
24	2.210	1.290	9.000	3.780	1.020	1.280	2.000	740	693	1.040	1.180	810
25	1.660	1.350	7.520	3.840	1.150	1.240	1.840	760	712	1.040	1.180	1.090
26	1.240	2.230	7.050	3.740	1.140	1.210	1.760	721	731	1.030	1.180	702
27	1.390	2.270	9.610	3.160	1.160	1.200	1.600	702	712	984	1.180	674
28	1.450	2.670	9.420	2.340	1.140	1.240	1.340	693	683	860	1.240	910
29	1.460	2.750	9.190	2.060	------	1.110	1.080	683	683	820	1.270	770
30	1.400	1.940	7.780	1.460	------	1.120	1.200	674	683	810	1.290	645
31	1.610	------	6.560	1.360	------	1.260	------	674	------	800	1.290	------
TOTAL	36.470	77.360	158.460	154.880	30.600	39.810	41.915	26.424	23.827	26.207	32.400	28.993
MEAN	1.176	2.579	5.112	4.996	1.093	1.284	1.397	852	794	845	1.045	966
MAX	2.230	3.150	9.610	9.560	1.280	1.480	2.240	1.240	1.940	1.120	1.290	1.530
MIN	750	1.290	920	1.360	1.020	1.110	890	674	655	627	770	627
AC-FT	72.340	153.400	314.300	307.200	60.700	78.960	83.140	52.410	47.260	51.980	64.270	57.510

CAL YR 1972 TOTAL 1.402.982 MEAN 3.833 MAX 17.600 MIN 428 AC-FT 2.783.000
WTR YR 1973 TOTAL 677.346 MEAN 1.856 MAX 9.610 MIN 627 AC-FT 1.344.000

14188800 THOMAS CREEK NEAR SCIO, OREG.

LOCATION.--Lat 44°42'42", long 122°45'55", in SE¼SE¼ sec.11, T.10 S., R.1 W., Linn County, on left bank 0.3 mi (0.5 km) upstream from bridge on State Highway 226, 1.6 mi (2.6 km) upstream from Mill Creek, 4.2 mi (6.8 km) east of Scio, and at mile 14.6 (23.5 km).

DRAINAGE AREA.--109 mi^2 (282 km^2).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 380.84 ft (116.080 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 503 ft^3/s (14.2 m^3/s), 62.67 in/yr (1,592 mm/yr), 364,400 acre-ft/yr (499 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,980 ft^3/s (198 m^3/s) Dec. 21, gage height, 10.51 ft (3.203 m); minimum, 13 ft^3/s (0.368 m^3/s) Aug. 20.

Period of record: Maximum discharge, 27,400 ft^3/s (776 m^3/s) Dec. 22, 1964, gage height, 18.44 ft (5.621 m), from rating curve extended above 7,200 ft^3/s (204 m^3/s), on basis of slope-area measurement of peak flow; maximum gage height, 19.58 ft (5.968 m) Jan. 21, 1972, backwater from debris; minimum discharge, 7.8 ft^3/s (0.221 m^3/s) Aug. 20, 1967.

REMARKS.--Records good. No regulation. Several small diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WRD Oreg. 1971: 1965(P), 1966(P), 1969(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	67	229	630	410	735	490	226	112	123	25	27
2	44	271	313	680	376	685	478	208	109	110	22	25
3	42	322	331	585	349	600	438	203	105	99	23	22
4	40	615	265	502	334	538	414	205	99	93	22	21
5	38	522	229	462	325	478	402	185	93	89	25	19
6	35	334	214	406	316	438	380	173	86	82	24	20
7	34	340	188	359	292	383	340	175	83	77	23	59
8	33	380	160	325	271	349	310	203	80	75	22	46
9	33	376	145	307	259	340	292	211	79	68	22	33
10	43	494	135	292	301	1,060	280	226	76	63	22	28
11	49	369	125	538	295	824	262	188	72	61	21	25
12	39	283	115	2,020	295	655	253	170	79	56	21	22
13	35	241	110	4,620	277	595	241	158	86	55	21	22
14	34	203	105	2,450	256	518	226	145	79	49	17	20
15	33	173	100	1,460	247	470	208	135	94	46	16	21
16	31	151	286	1,850	232	498	319	127	149	44	16	22
17	31	137	2,080	1,740	277	642	518	117	366	40	17	20
18	30	155	1,840	1,310	259	506	560	110	304	40	17	25
19	30	220	3,160	1,020	238	720	650	105	214	38	18	31
20	30	183	2,450	866	220	670	575	102	170	41	17	70
21	30	168	4,440	770	205	595	522	97	141	45	15	226
22	31	155	2,950	650	195	546	550	93	125	49	16	165
23	30	147	2,560	560	185	494	526	107	115	44	17	331
24	29	139	3,090	750	183	458	454	295	109	37	48	690
25	29	168	1,980	760	422	430	406	298	211	34	75	538
26	39	848	1,320	620	410	394	372	211	325	31	44	242
27	37	538	2,270	534	438	376	337	180	238	30	33	198
28	77	390	1,790	478	394	390	301	160	185	29	29	149
29	88	319	1,200	442	------	349	271	143	153	30	26	121
30	59	265	920	482	------	362	250	129	137	26	25	105
31	49	------	760	474	------	454	------	119	------	24	28	------
TOTAL	1,229	8,973	35,860	28,942	8,261	16,452	11,625	5,204	4,274	1,728	767	3,393
MEAN	39.6	299	1,157	934	295	531	388	168	142	55.7	24.7	113
MAX	88	848	4,440	4,620	438	1,060	650	298	366	123	75	690
MIN	29	67	100	292	183	340	208	93	72	24	15	15
CFSM	.36	2.74	10.6	8.57	2.71	4.87	3.56	1.54	1.30	.51	.23	1.04
IN.	.42	3.06	12.24	9.88	2.82	5.61	3.97	1.78	1.46	.59	.26	1.16
AC-FT	2,440	17,800	71,130	57,410	16,390	32,630	23,060	10,320	8,480	3,430	1,520	6,730

CAL YR 1972 TOTAL 235,810 MEAN 644 MAX 9,190 MIN 13 CFSM 5.91 IN 80.48 AC-FT 467,700
WTR YR 1973 TOTAL 126,708 MEAN 347 MAX 4,620 MIN 15 CFSM 3.18 IN 43.24 AC-FT 251,300

PEAK DISCHARGE (BASE, 3,500 CFS).--Dec. 21 (0200) 6,980 cfs (10.51 ft); Jan. 12 (2330) 6,000 cfs (9.86 ft).

14189000 SANTIAM RIVER AT JEFFERSON, OREG.

LOCATION.--Lat 44°42'55", long 123°00'40", in SE¼ sec.11, T.10 S., R.3 W., Marion County, on right bank 350 ft (107 m) upstream from Southern Pacific railroad bridge at Jefferson, 2.1 mi (3.4 km) downstream from confluence of North and South Santiam Rivers, and at mile 9.62 (15.5 km).

DRAINAGE AREA.--1,790 mi² (4,640 km²), approximately.

PERIOD OF RECORD.--October 1905 to June 1906 (gage heights and discharge measurements only), October 1907 to September 1916, October 1939 to current year. Gage-height records collected at same site since 1907 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 199.63 ft (60.847 m) above mean sea level. Prior to Sept. 22, 1940, nonrecording gages at sites within 350 ft (107 m) downstream at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--43 years (1907-16, 1939-73) 7,824 ft³/s (222.0 m³/s), 5,668,000 acre-ft/yr (6.99 km³/yr).

EXTREMES.--Current year: Maximum discharge, 42,900 ft³/s (1,215 m³/s) Dec. 21, gage height, 14.15 ft (4.313 m); minimum, 1,140 ft³/s (32.3 m³/s) June 9.

Period of record: Maximum discharge, 197,000 ft³/s (5,580 m³/s) Dec. 22, 1964, gage height, 24.22 ft (7.382 m); minimum observed, 260 ft³/s (7.36 m³/s) Aug. 15-22, Aug. 24 to Sept. 2, 1940.

Flood stage of 25.0 ft (7.62 m) was reached in December 1861, and 23.4 ft (7.13 m) in February 1890 (information from Corps of Engineers). On Nov. 21, 1921, the stage reached 19.5 ft (5.94 m) at gage on railroad bridge 350 ft (107 m) downstream, corresponding gage height at present site and datum, 24.4 ft (7.44 m), from curve of relation, discharge, 202,000 ft³/s (5,720 m³/s).

REMARKS.--Records good. Flow regulated since 1953 by Detroit Lake (see station 14180500), since 1966 by Green Peter Lake (see station 14186100), and by Foster Lake (see station 14186600). Salem Canal diverts from North Santiam River at Stayton for irrigation and power; most of this water reaches Willamette River by way of Mill Creek at Salem. Stayton Canal diverts from North Santiam River at Stayton for irrigation of lands near West Stayton; some return flow reaches North Santiam River above station. Albany power canal diverts from South Santiam River at Lebanon; return flow reaches Willamette River at Albany. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 904: Drainage area. WSP 1094: 1908, 1910, 1912, 1943. WSP 1248: 1911, 1915-16(M). WSP 1935: 1909.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.480	3.800	4.470	18.500	4.500	5.180	5.140	2.910	1.440	1.700	1.260	2.000
2	3.310	5.820	4.630	16.500	4.290	5.580	5.040	2.810	1.410	1.580	1.250	1.980
3	2.970	5.700	6.510	13.900	4.210	5.140	4.700	2.780	1.400	1.510	1.320	2.370
4	2.560	7.640	7.110	14.500	3.870	4.870	4.440	2.790	1.350	1.630	1.380	3.180
5	2.490	8.550	7.110	12.000	3.780	4.540	4.420	2.560	1.300	1.590	1.400	2.500
6	2.490	7.420	6.600	11.600	3.710	4.460	4.290	2.240	1.240	1.530	1.400	1.930
7	2.310	6.890	6.470	10.400	3.620	4.170	4.050	2.210	1.200	1.520	1.400	3.180
8	2.430	7.020	9.230	9.920	3.450	3.900	3.790	2.400	1.190	1.510	1.380	2.500
9	2.410	6.820	10.300	9.990	3.340	3.790	3.600	2.690	1.190	1.450	1.390	1.880
10	2.530	7.520	10.200	9.860	3.390	5.590	3.280	2.660	1.190	1.390	1.420	1.820
11	2.530	7.380	9.980	8.750	3.550	6.460	2.950	2.500	1.360	1.420	1.430	2.650
12	2.520	6.910	8.220	13.000	3.500	5.350	2.930	2.330	2.330	1.480	1.450	2.670
13	2.500	6.490	6.010	33.500	3.440	5.190	2.930	2.190	2.330	1.470	1.430	2.840
14	2.540	6.450	4.260	24.600	3.290	4.950	2.820	2.140	1.370	1.490	1.440	2.340
15	2.270	6.360	3.140	20.400	3.220	4.640	2.690	2.180	1.360	1.530	1.460	2.220
16	2.380	6.070	2.890	21.700	3.150	4.500	2.780	2.230	1.470	1.520	1.660	2.180
17	2.340	6.070	9.670	23.600	3.290	5.070	4.190	2.030	2.440	1.640	1.670	2.390
18	2.380	6.310	15.400	20.400	3.420	4.750	4.720	1.740	2.930	1.670	1.670	2.440
19	2.330	6.450	20.300	18.000	3.280	5.910	5.310	1.630	2.280	1.640	1.690	2.440
20	2.790	6.200	20.300	13.400	3.170	5.860	5.340	1.540	1.940	1.620	1.670	2.450
21	3.590	5.620	35.000	12.500	3.120	5.450	4.870	1.490	1.740	1.670	1.660	2.860
22	3.600	5.290	24.900	11.300	3.040	5.170	4.830	1.440	1.580	1.690	1.670	2.680
23	3.910	4.740	22.400	9.390	2.980	4.850	5.140	1.460	1.550	1.690	1.740	2.720
24	3.750	3.960	26.300	9.740	2.940	4.600	4.840	1.840	1.640	1.670	2.000	4.080
25	3.520	3.840	22.200	10.400	3.630	4.430	4.530	2.390	1.820	1.590	2.040	5.310
26	2.950	9.620	17.600	9.630	4.070	4.240	4.270	2.030	2.530	1.570	1.950	3.270
27	3.320	8.500	28.500	8.060	4.470	4.210	4.110	1.920	2.530	1.530	3.000	2.600
28	3.540	7.110	32.500	5.990	4.120	4.500	3.650	1.800	2.160	1.430	3.160	2.260
29	3.600	6.840	31.500	5.480	------	4.020	3.080	1.630	1.920	1.360	2.220	2.370
30	3.310	5.490	25.500	5.100	------	3.910	2.940	1.540	1.810	1.340	2.080	1.940
31	3.540	------	19.500	4.860	------	4.650	------	1.480	------	1.280	2.060	------
TOTAL	90.190	192.880	458.700	416.970	99.840	149.930	121.720	65.580	52.000	47.710	52.750	78.540
MEAN	2.909	6.429	14.800	13.450	3.566	4.836	4.057	2.115	1.733	1.539	1.702	2.620
MAX	3.910	9.620	35.000	33.500	4.500	6.460	5.340	2.910	2.930	1.700	3.160	5.310
MIN	2.270	3.800	2.890	4.860	2.940	3.740	2.690	1.440	1.190	1.280	1.250	1.820
AC-FT	178.900	382.600	909.800	827.100	198.000	297.400	241.400	130.100	103.100	94.630	104.600	155.800

CAL YR 1972 TOTAL 3.723.760 MEAN 10.170 MAX 78.800 MIN 1.280 AC-FT 7.386.000
WTR YR 1973 TOTAL 1.826.860 MEAN 5.005 MAX 35.000 MIN 1.190 AC-FT 3.624.000

14189500 LUCKIAMUTE RIVER NEAR HOSKINS, OREG.

LOCATION.--Lat 44°43'10", long 123°30'10", in NE¼ sec.11, T.10 S., R.7 W., Benton County, on right bank 0.2 mi (0.3 km) downstream from Benton County line, 3.5 mi (5.6 km) northwest of Hoskins, and at mile 43.2 (69.5 km).

DRAINAGE AREA.--34.3 mi^2 (88.8 km^2).

PERIOD OF RECORD.--May 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 378.7 ft (115.43 m) above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--39 years, 207 ft^3/s (5.86 m^3/s), 81.96 in/yr (2,082 mm/yr), 150,000 acre-ft/yr (185 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,030 ft^3/s (85.8 m^3/s) Dec. 21, gage height, 8.47 ft (2.582 m); minimum, 10 ft^3/s (0.28 m^3/s) Sept. 4-6, 11, 12, 16, 17.
Period of record: Maximum discharge, 5,560 ft^3/s (157 m^3/s) Dec. 14, 1946, Feb. 17, 1949; maximum gage height, 13.22 ft (4.029 m) Dec. 14, 1946; minimum discharge, 4.0 ft^3/s (0.11 m^3/s) Sept. 5-8, 1962.
Flood of Dec. 6, 1933, reached a stage of about 13.8 ft (4.21 m), from information by local residents.

REMARKS.--Records good. Logponds upstream cause diurnal fluctuation at times. Minor diversion above station by pumping for irrigation.

REVISIONS (WATER YEARS).--WSP 834: 1936(M). WSP 1638: 1943(P), 1946(P). WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	31	82	351	177	185	165	67	33	32	14	12
2	14	64	107	321	165	190	153	64	33	29	14	11
3	14	93	94	284	155	193	142	64	32	28	13	11
4	13	182	84	249	143	186	132	61	31	27	13	10
5	13	104	82	229	132	174	122	57	30	26	13	10
6	12	80	78	202	129	191	113	56	29	26	13	11
7	12	87	75	181	123	170	105	55	29	26	13	16
8	11	80	73	165	116	154	99	66	29	25	13	13
9	12	98	71	151	110	150	93	78	28	24	13	12
10	14	140	70	145	113	292	88	69	27	23	13	11
11	14	96	68	185	104	289	83	59	27	22	13	10
12	13	74	67	666	101	274	79	55	28	21	12	10
13	13	66	66	1,270	94	260	76	51	29	21	12	11
14	13	56	65	893	93	228	71	48	29	20	12	11
15	13	50	65	599	89	204	68	46	30	19	12	11
16	13	45	90	552	85	201	94	44	48	19	12	11
17	13	41	150	569	90	188	124	42	69	18	12	10
18	13	57	360	527	84	193	180	40	49	18	12	13
19	13	66	911	482	79	250	201	39	39	18	11	16
20	13	56	1,180	447	76	253	166	39	34	18	11	46
21	14	71	2,410	412	73	246	143	37	32	19	11	38
22	14	67	1,720	359	70	221	128	37	30	18	11	33
23	13	65	1,260	315	68	198	115	44	31	18	11	42
24	13	59	1,140	326	67	179	105	65	31	18	22	143
25	13	104	874	294	141	161	97	50	65	17	19	77
26	13	291	852	264	128	146	90	43	56	16	14	42
27	14	182	1,370	238	120	150	84	40	44	16	13	32
28	29	136	983	214	113	136	79	38	37	15	12	27
29	25	109	665	194	------	126	75	36	34	15	12	25
30	18	92	522	211	------	135	71	35	33	14	12	23
31	16	------	416	199	------	161	------	34	------	14	12	------
TOTAL	443	2,742	16,050	11,494	3,038	6,084	3,341	1,559	1,076	640	400	748
MEAN	14.3	91.4	518	371	109	196	111	50.3	35.9	20.6	12.9	24.9
MAX	29	291	2,410	1,270	177	292	201	78	69	32	22	143
MIN	11	31	65	145	67	126	68	34	27	14	11	10
AC-FT	879	5,440	31,840	22,800	6,030	12,070	6,630	3,090	2,130	1,270	793	1,480

CAL YR 1972 TOTAL 87,456.7 MEAN 239 MAX 3,490 MIN 8.2 AC-FT 173,500
WTR YR 1973 TOTAL 47,615.0 MEAN 130 MAX 2,410 MIN 10 AC-FT 94,440

PEAK DISCHARGE (BASE, 2,000 CFS).--Dec. 21 (0400) 3,030 cfs (8.47 ft).

14190500 LUCKIAMUTE RIVER NEAR SUVER, OREG.

LOCATION.--Lat 44°47'00", long 123°14'00", in SW¼SW¼ sec.18, T.9 S., R.4 W., Polk County, on right bank 10 ft (3 m) upstream from highway bridge at Helmick State Park, 3.0 mi (4.8 km) northwest of Suver, 4.7 mi (7.6 km) downstream from Little Luckiamute River, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--240 mi^2 (622 km^2).

PERIOD OF RECORD.--August 1905 to October 1911, July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 171.92 ft (52.401 m) above mean sea level. Aug. 18, 1905, to Oct. 31, 1911, nonrecording gage at present site at different datum, Aug. 20 to Oct. 15, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--39 years, 926 ft^3/s (26.2 m^3/s), 52.40 in/yr (1,331 mm/yr), 670,900 acre-ft/yr (827 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,620 ft^3/s (272 m^3/s) Dec. 22, gage height, 28.45 ft (8.672 m); minimum, 3.6 ft^3/s (0.10 m^3/s) Aug. 3.

Period of record: Maximum discharge, 32,900 ft^3/s (932 m^3/s) Dec. 22, 1964, gage height, 34.52 ft (10.522 m); minimum, 0.65 ft^3/s (0.018 m^3/s) Aug. 13, 1966.

REMARKS.--Records good. Some diurnal fluctuation during periods of low flow caused by millpond above station. A few small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1044: Drainage area. WSP 1094: 1945-46. WSP 1248: 1905-11.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	54	266	1.650	938	827	748	308	118	87	8.6	28
2	48	97	255	1.460	862	1.100	708	294	115	88	6.4	26
3	46	175	299	1.290	810	994	650	285	113	71	6.4	25
4	43	348	266	1.130	759	979	607	282	110	66	5.9	21
5	43	475	241	1.020	703	883	572	272	96	68	7.5	19
6	41	277	220	942	662	924	535	259	90	59	16	21
7	40	248	210	830	619	883	500	259	81	57	8.6	24
8	39	294	200	758	582	788	473	250	81	58	6.9	34
9	38	241	195	699	556	727	444	277	81	59	9.2	34
10	40	343	190	655	552	859	425	299	86	49	8.6	27
11	45	336	190	756	555	1.080	403	261	84	43	8.0	26
12	46	228	185	1.780	516	971	384	237	74	40	14	24
13	45	173	185	4.700	493	968	380	220	79	37	18	23
14	42	155	180	5.860	465	891	363	207	77	37	9.2	23
15	41	128	182	4.130	457	812	342	194	78	32	6.9	23
16	39	111	182	3.040	436	759	343	182	89	34	8.6	25
17	39	100	502	3.380	427	765	490	173	156	24	10	24
18	39	96	1.740	2.940	443	729	536	162	205	23	12	26
19	38	164	2.360	2.800	413	971	754	155	141	21	9.8	29
20	38	184	3.270	2.290	395	1.110	679	151	111	19	12	49
21	38	154	5.770	2.140	378	1.020	590	150	96	20	9.8	130
22	40	196	8.860	1.820	365	950	536	142	84	27	8.6	119
23	42	178	7.490	1.570	348	851	493	145	79	30	9.2	122
24	41	171	6.250	1.510	341	786	456	206	83	23	16	156
25	40	153	5.400	1.650	617	729	427	243	102	20	49	379
26	40	448	4.020	1.350	976	673	402	196	173	19	52	205
27	39	660	4.280	1.210	880	640	378	170	146	16	38	131
28	42	457	5.090	1.100	762	671	357	158	119	15	29	101
29	75	367	4.050	1.000	------	604	338	144	103	14	26	84
30	80	306	2.710	943	------	579	323	132	93	18	24	75
31	60	------	2.060	1.100	------	618	------	124	------	12	26	------
TOTAL	1.378	7.317	67.298	57.503	16.310	26.146	14.636	6.537	3.143	1.186	480.2	2.033
MEAN	44.5	244	2.171	1.855	583	843	488	211	105	38.3	15.5	67.8
MAX	80	660	8.860	5.860	976	1.110	754	308	205	88	52	379
MIN	38	54	180	655	341	579	323	124	74	12	5.9	19
CFSM	.19	1.02	9.05	7.73	2.43	3.51	2.03	.88	.44	.16	.06	.28
IN.	.21	1.13	10.43	8.91	2.53	4.05	2.27	1.01	.49	.18	.07	.32
AC-FT	2.730	14.510	133.500	114.100	32.350	51.860	29.030	12.970	6.230	2.350	952	4.030

CAL YR 1972 TOTAL 374.822.0 MEAN 1.024 MAX 20.100 MIN 15 CFSM 4.27 IN 58.10 AC-FT 743.500
WTR YR 1973 TOTAL 203.967.2 MEAN 559 MAX 8.860 MIN 5.9 CFSM 2.33 IN 31.61 AC-FT 404.600

PEAK DISCHARGE (BASE, 6,600 CFS).--Dec. 22 (0230) 9,620 cfs (28.45 ft).

14190700 RICKREALL CREEK NEAR DALLAS, OREG.

LOCATION.--Lat 44°54'50", long 123°23'20", in SE¼SW¼ sec.35, T.7 S., R.6 W., Polk County, on left bank 1.8 mi (2.9 km) downstream from Canyon Creek, 3.5 mi (5.6 km) west of Dallas, 5.1 mi (8.2 km) downstream from Dallas Dam, and at mile 19.1 (30.7 km).

DRAINAGE AREA.--27.4 mi^2 (71.0 km^2).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 520 ft (160 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 145 ft^3/s (4.11 m^3/s), 71.86 in/yr (1,825 mm/yr), 105,100 acre-ft/yr (130 hm^3/yr), adjusted for diversion and storage.

EXTREMES.--Current year: Maximum discharge, 2,870 ft^3/s (81.3 m^3/s) Dec. 21, gage height, 6.12 ft (1.865 m); no flow, Oct. 4, 26.
Period of record: Maximum discharge, 7,160 ft^3/s (203 m^3/s) Dec. 22, 1964, gage height, 8.78 ft (2.676 m); no flow at times.

REMARKS.--Records excellent. Low flow regulated since June 1960 by Dallas Reservoir, usable capacity, 2,010 acre-ft (2.48 hm^3). Diversion for city of Dallas municipal supply from four tributaries and Rickreall Creek above station.

COOPERATION.--Records of diversion, monthend elevations of reservoir, and reservoir capacity curve furnished by city of Dallas.

REVISIONS.--WSP 1718: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	2.5	46	218	129	162	94	36	16	8.7	3.3	5.8
2	6.8	4.4	51	193	119	169	88	35	16	7.9	3.3	5.8
3	6.5	9.3	45	166	111	161	82	33	16	6.8	3.2	5.2
4	3.3	28	39	144	102	149	78	33	14	6.2	3.3	5.2
5	6.2	61	39	132	94	135	73	30	12	5.6	3.3	5.1
6	3.6	77	36	116	88	137	68	30	9.8	5.9	3.7	5.8
7	3.6	80	34	104	81	123	64	29	9.4	5.3	3.7	5.4
8	3.4	84	32	94	77	111	61	35	8.7	5.1	3.2	5.1
9	3.7	91	32	87	73	103	57	34	8.4	4.5	2.9	5.1
10	4.7	93	30	86	79	155	53	32	7.9	6.2	2.9	5.1
11	6.5	91	28	153	75	163	48	28	7.5	5.3	3.3	5.0
12	6.3	89	26	846	72	156	40	26	8.4	5.1	3.3	4.9
13	6.2	87	26	1,240	67	155	39	25	10	5.1	3.3	4.7
14	6.1	84	24	700	65	144	41	21	8.2	5.1	3.0	4.8
15	5.9	81	24	455	64	132	34	21	7.6	4.8	2.7	4.6
16	5.3	61	65	411	61	127	54	18	15	4.8	3.2	4.5
17	4.7	14	136	421	64	118	65	18	28	4.5	3.5	4.6
18	7.8	17	373	367	61	123	81	17	20	4.5	3.7	4.4
19	7.5	18	887	308	58	169	92	18	16	4.5	3.7	5.3
20	6.1	19	796	280	54	169	75	17	13	4.8	3.5	7.4
21	1.6	20	2,260	266	52	161	61	17	11	4.8	3.7	7.7
22	.42	20	1,500	232	49	143	59	15	9.9	4.8	5.6	9.9
23	.57	20	925	199	46	129	64	23	9.1	4.8	6.8	8.6
24	1.8	20	769	275	45	117	60	50	10	4.5	8.3	13
25	1.8	20	545	286	116	107	49	34	23	4.5	6.5	14
26	.54	22	553	233	137	98	42	29	18	5.6	6.5	13
27	.82	21	998	195	141	96	46	27	16	3.3	6.4	12
28	2.0	4.9	663	168	124	89	43	23	12	3.0	6.3	12
29	1.3	63	439	147	------	82	40	20	10	3.2	6.1	12
30	1.3	54	338	150	------	82	38	17	9.9	5.1	5.9	11
31	1.1	------	264	143	------	87	------	17	------	3.9	5.8	------
TOTAL	124.55	1,356.1	12,023	8,815	2,304	4,052	1,794	808	380.8	158.2	133.9	217.0
MEAN	4.02	45.2	388	284	82.3	131	59.8	26.1	12.7	5.10	4.32	7.23
MAX	7.8	93	2,260	1,240	141	169	94	50	28	8.7	8.3	14
MIN	.42	2.5	24	86	45	82	38	15	7.5	3.0	2.7	4.4
AC-FT	247	2,690	23,850	17,480	4,570	8,040	3,560	1,600	755	314	266	430
MEAN†	4.39	68.6	391	287	85.0	133	62.7	29.5	16.8	7.94	2.20	12.5
CFSM†	.16	2.50	14.3	10.5	3.10	4.85	2.29	1.08	.61	.29	.08	.46
IN.†	.18	2.79	16.44	12.08	3.23	5.61	2.55	1.24	.68	.33	.09	.51
AC-FT†	270	4,080	24,020	17,650	4.720	8,200	3,720	1,810	1,000	488	135	743

CAL YR 1972 TOTAL 59,122.05 MEAN 162 MAX 3,430 MIN .01 AC-FT 117,300 MEAN† 166 CFSM† 6.06 IN.† 82.55 AC-FT† 120,600
WTR YR 1973 TOTAL 32,166.55 MEAN 88.1 MAX 2,260 MIN .42 AC-FT 63,800 MEAN† 92.3 CFSM† 3.37 IN.† 45.74 AC-FT† 66,830

PEAK DISCHARGE (BASE, 1,300 CFS).--Dec. 21 (1030) 2,870 cfs (6.12 ft); Jan. 13 (0930) 1,390 cfs (4.79 ft).

† Adjusted for diversion and change in contents of Dallas Reservoir.

14191000 WILLAMETTE RIVER AT SALEM, OREG.

LOCATION.--Lat 44°56'40", long 123°02'30", in SW¼ sec.22, T.7 S., R.3 W., Marion County, on right bank 300 ft (91 m) upstream from Center Street Bridge in Salem and at mile 84.16 (135.41 km).

DRAINAGE AREA.--7,280 mi² (18,900 km²), approximately.

PERIOD OF RECORD.--October 1909 to December 1916, January 1923 to current year. Monthly discharge only January 1923 to September 1927, published in WSP 1318. Gage-height records collected at about the same site since 1892 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 106.14 ft (32.351 m) above mean sea level. Oct. 1, 1909, to Dec. 31, 1916, nonrecording gage at site 0.5 mi (0.8 km) upstream at datum 8.00 ft (2.438 m) higher. Jan. 1, 1923, to Nov. 26, 1934, nonrecording gage at Center Street Bridge at datum 8.00 ft (2.438 m) higher. Nov. 27, 1934, to Sept. 30, 1962, water-stage recorder at present site at datum 8.00 ft (2.438 m) higher.

AVERAGE DISCHARGE.--57 years, 23,540 ft³/s (667 m³/s) 43.91 in/yr (1,115 mm/yr), 17,050,000 acre-ft/yr (21.0 km³/yr).

EXTREMES.--Current year: Maximum discharge, 84,900 ft³/s (2,400 m³/s) Dec. 21, gage height, 20.45 ft (6.233 m); minimum, 5,600 ft³/s (159 m³/s) Aug. 3, 4, gage height, 4.30 ft (1.311 m).

Period of record: Maximum discharge, 348,000 ft³/s (9,860 m³/s) Jan. 8, 1923, gage height, 38.3 ft (11.67 m), present datum; minimum, 2,470 ft³/s (70.0 m³/s) Aug. 27, 1940, gage height, 3.55 ft (1.082 m), present datum.

Maximum discharge, 500,000 ft³/s (14,200 m³/s) Dec. 4, 1861, gage height, about 47 ft (14.3 m) present datum, from rating curve extended above 250,000 ft³/s (7,080 m³/s) in 1916. Floods of Jan. 16, 1881, and Feb. 5, 1890, reached stages of 44.3 ft (13.50 m), discharge, 428,000 ft³/s (12,100 m³/s), and 45.1 ft (13.75 m), discharge, 448,000 ft³/s (12,700 m³/s), respectively, from floodmarks and information by Corps of Engineers.

REMARKS.--Records excellent. Flow regulated by 12 reservoirs above station (see elsewhere in this report). Many small diversions for irrigation above station; part of flow of Salem Canal, which diverts water from North Santiam River, returns to Willamette River below station, through Mill Creek at Salem (see station 14192000). Record of water temperatures and chemical analysis at site 0.4 mi (0.6 km) upstream for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1318: 1915(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,300	13,000	13,600	42,800	18,000	15,000	16,000	9,690	6,200	6,330	5,760	7,520
2	12,400	14,200	12,900	38,500	17,000	17,400	17,700	9,410	6,060	6,240	5,700	7,190
3	11,100	15,600	14,100	36,300	16,000	18,100	17,000	9,180	6,180	6,060	5,660	7,150
4	9,830	16,600	15,900	33,100	15,100	17,000	16,000	9,070	6,140	6,020	5,620	7,680
5	9,130	19,400	16,500	30,000	14,500	16,100	15,000	9,040	6,020	6,020	5,720	8,350
6	8,880	19,600	16,700	27,700	14,300	15,700	14,300	8,610	5,880	5,980	5,900	7,170
7	9,040	18,300	16,400	25,200	14,000	15,700	13,700	8,330	5,860	5,960	5,920	7,490
8	8,790	18,400	17,500	23,400	13,600	14,600	13,000	8,300	5,800	5,980	6,020	8,560
9	8,820	18,200	19,100	22,000	12,900	13,700	12,300	8,510	5,800	6,020	5,980	7,190
10	9,160	17,900	17,600	21,800	12,500	13,900	11,800	8,720	5,920	5,980	5,940	6,840
11	9,830	19,100	16,400	21,300	12,600	17,900	10,900	8,460	5,900	5,900	5,960	7,040
12	10,200	19,000	16,500	27,000	12,400	18,400	10,100	8,120	6,490	5,880	5,880	7,490
13	10,400	17,900	15,300	55,000	12,300	17,000	10,200	7,780	7,010	5,900	5,920	7,540
14	10,200	17,300	13,200	77,900	11,900	16,300	10,100	7,560	6,400	5,900	5,900	7,440
15	10,300	17,100	10,400	65,200	11,500	15,700	10,000	7,280	5,920	5,900	5,920	7,120
16	10,100	16,100	8,690	60,400	11,300	14,800	9,720	7,470	6,020	5,980	5,880	7,120
17	10,000	15,400	11,900	67,000	11,100	14,900	10,500	7,440	6,680	5,960	6,180	7,040
18	10,100	14,700	30,100	67,700	11,300	15,500	12,600	7,060	8,480	6,020	6,900	7,470
19	10,000	14,900	42,700	63,100	11,400	16,500	14,700	6,770	8,880	6,140	7,120	7,350
20	9,940	15,000	55,800	51,600	11,100	21,100	16,100	6,640	7,640	6,220	7,260	8,040
21	11,000	14,800	73,800	42,900	10,900	21,300	15,800	6,530	6,840	6,290	7,190	8,460
22	12,500	13,900	81,400	37,600	10,600	19,300	15,300	6,310	6,310	6,400	7,210	9,660
23	12,600	13,500	79,400	33,200	10,300	18,100	14,900	6,350	6,040	6,530	7,280	8,400
24	12,800	12,100	78,500	29,500	10,100	16,800	14,500	6,660	6,100	6,420	7,540	9,490
25	12,700	11,500	78,700	31,200	10,900	15,700	13,700	7,640	6,530	6,180	7,680	11,800
26	12,100	14,100	68,600	29,900	13,500	14,900	12,600	8,090	7,210	6,000	7,470	11,500
27	12,100	17,800	65,800	27,200	14,300	14,400	12,000	7,470	7,710	5,960	7,300	9,660
28	12,600	16,200	71,100	22,400	14,500	14,600	11,400	7,100	7,230	5,940	8,270	8,480
29	12,900	16,500	73,400	19,600	------	14,400	10,600	6,620	6,620	5,900	8,270	8,270
30	12,900	14,900	66,800	18,500	------	13,700	10,000	6,310	6,290	5,940	7,320	7,910
31	12,700	------	51,200	18,100	------	14,000	------	6,200	------	5,840	7,300	------
TOTAL	339,420	483,000	1,170.0M	1,167.1M	359,900	502,500	392,520	238,720	196,160	187,790	203,970	241,420
MEAN	10,950	16,100	37,740	37,650	12,850	16,210	13,080	7,701	6,539	6,058	6,580	8,047
MAX	14,300	19,600	81,400	77,900	18,000	21,300	17,700	9,690	8,880	6,530	8,270	11,800
MIN	8,790	11,500	8,690	18,100	10,100	13,700	9,720	6,200	5,800	5,840	5,620	6,840
CFSM	1.50	2.21	5.18	5.17	1.77	2.23	1.80	1.06	.90	.83	.90	1.11
IN.	1.73	2.47	5.98	5.96	1.84	2.57	2.01	1.22	1.00	.96	1.04	1.23
AC-FT	673,200	958,000	2,321M	2,315M	713,900	996,700	778,600	473,500	389,100	372,500	404,600	478,900

CAL YR 1972 TOTAL 11,009,680 MEAN 30,080 MAX 172,000 MIN 6,580 CFSM 4.13 IN 56.26 AC-FT 21,840,000
WTR YR 1973 TOTAL 5,482,490 MEAN 15,020 MAX 81,400 MIN 5,620 CFSM 2.06 IN 28.01 AC-FT 10,870,000

14192000 MILL CREEK AT SALEM, OREG.

LOCATION.--Lat 44°56'05", long 123°01'00", in NE¼ sec.26, T.7 S., R.3 W., Marion County, on left bank at State Street Bridge in Salem, 220 ft (67 m) downstream from 19th Street power diversion and at mile 2.11 (3.39 km).

DRAINAGE AREA.--110 mi^2 (285 km^2).

PERIOD OF RECORD.--November, December 1934, August to October 1938, May 1939 to current year. Prior to October 1940 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 166.12 ft (50.633 m) above mean sea level. See WSP 1738 for history of changes prior to Oct. 10, 1940.

AVERAGE DISCHARGE.--34 years (1939-73), 138 ft^3/s (3.908 m^3/s), 99,980 acre-ft/yr (123 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 774 ft^3/s (21.9 m^3/s) Dec. 21, gage height, 7.02 ft (2.140 m); minimum, 6.7 ft^3/s (0.19 m^3/s) July 16.

Period of record: Maximum discharge, 1,870 ft^3/s (53.0 m^3/s) Dec. 23, 1964, gage height, 8.36 ft (2.548 m); no flow Oct. 2, 1938.

REMARKS.--Records good. Diurnal fluctuation caused by powerplant above station. Salem power canal diverts water into Mill Creek near Stayton. Several diversions from Mill Creek, including Shelton flood bypass 1.2 mi (1.9 km) upstream and 19th Street power diversion 220 ft (67 m) upstream.

REVISIONS (WATER YEARS).--WSP 1218: Drainage area. WSP 1718: 1954(M), 1956(M), 1958(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	53	55	213	150	138	171	44	56	62	39	24
2	37	49	78	213	138	148	152	43	55	50	40	30
3	36	44	96	196	130	146	136	38	56	72	53	31
4	31	67	92	174	120	144	126	39	48	67	58	42
5	28	53	85	163	111	138	116	72	42	40	37	41
6	26	42	82	152	105	150	105	67	35	34	34	27
7	26	38	75	128	95	134	95	63	31	34	35	58
8	43	45	70	116	85	120	84	69	34	37	36	58
9	56	43	60	112	81	114	75	85	42	38	40	38
10	60	63	54	116	82	156	68	87	47	34	51	33
11	76	50	50	187	81	148	56	87	41	34	49	39
12	90	41	48	334	75	134	55	78	41	30	38	47
13	90	34	46	564	68	138	65	72	50	27	39	51
14	95	39	45	424	64	130	63	69	51	23	40	44
15	98	30	44	328	60	120	58	79	54	27	44	27
16	93	28	60	409	58	118	64	79	59	30	45	32
17	93	27	299	442	71	126	84	79	105	14	49	41
18	96	38	321	341	74	118	102	78	120	25	51	59
19	98	59	389	312	69	220	116	72	90	34	42	59
20	84	64	387	275	63	202	111	74	71	41	46	76
21	72	45	699	262	59	191	90	69	63	62	53	72
22	75	41	622	237	62	171	78	65	55	79	95	87
23	75	42	483	218	53	154	72	81	62	74	72	102
24	71	41	600	253	49	144	67	118	65	46	64	111
25	69	47	431	242	95	132	59	126	88	38	59	103
26	71	92	341	204	96	122	56	105	102	36	60	87
27	71	96	440	189	120	124	46	95	88	37	39	67
28	81	82	374	171	103	150	43	90	72	40	22	58
29	81	78	292	160	------	136	50	65	63	30	30	51
30	76	63	262	165	------	136	50	63	63	32	24	49
31	76	------	242	169	------	154	------	58	------	31	29	------
TOTAL	2,113	1,534	7,222	7,469	2,417	4,456	2,513	2,309	1,849	1,258	1,413	1,644
MEAN	68.2	51.1	233	241	86.3	144	83.8	74.5	61.6	40.6	45.6	54.8
MAX	98	96	699	564	150	220	171	126	120	79	95	111
MIN	26	27	44	112	49	114	43	38	31	14	22	24
AC-FT	4,190	3,040	14,320	14,810	4,790	8,840	4,980	4,580	3,670	2,500	2,800	3,260

CAL YR 1972 TOTAL 46,462 MEAN 127 MAX 1,150 MIN 13 AC-FT 92,160
WTR YR 1973 TOTAL 36,197 MEAN 99.2 MAX 699 MIN 14 AC-FT 71,800

14192500 SOUTH YAMHILL RIVER NEAR WILLAMINA, OREG.

LOCATION.--Lat 45°02'50", long 123°30'10", in sec.14, T.6 S., R.7 W., Polk County, on left bank 2.3 mi (3.7 km) southwest of Willamina, 2.8 mi (4.5 km) upstream from Willamina Creek, and at mile 45.5 (73.2 km).

DRAINAGE AREA.--133 mi^2 (344 km^2).

PERIOD OF RECORD.--May 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 235.55 ft (71.796 m) above mean sea level.

AVERAGE DISCHARGE.--39 years, 626 ft^3/s (17.7 m^3/s), 63.92 in/yr (1,624 mm/yr), 453,500 acre-ft/yr (559 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft^3/s (312 m^3/s) Dec. 21, gage height, 11.87 ft (3.618 m); minimum, 7.4 ft^3/s (0.21 m^3/s) Sept. 5, 6.
Period of record: Maximum discharge, 19,600 ft^3/s (555 m^3/s) Dec. 22, 1964, gage height, 17.07 ft (5.203 m); minimum, 2.6 ft^3/s (0.074 m^3/s) Oct. 11, 1952.

REMARKS.--Records excellent. Slight regulation occasionally at low flows by millpond upstream. No diversion above station.

REVISIONS (WATER YEARS).--WSP 814: Drainage area. WSP 1318: 1934.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	57	325	983	635	695	526	202	87	78	15	15
2	48	213	350	928	575	1.030	458	190	86	78	14	13
3	45	302	318	840	580	810	417	184	83	66	14	12
4	42	948	281	710	476	725	385	175	80	62	14	9.2
5	37	506	259	647	404	650	355	163	74	61	15	8.3
6	36	420	245	564	420	600	324	158	69	59	15	8.3
7	34	492	240	494	396	555	300	155	67	57	14	14
8	33	409	230	444	364	488	279	187	65	55	14	20
9	33	454	220	408	344	448	261	184	67	54	14	15
10	37	741	210	384	328	550	244	181	63	49	14	12
11	39	492	205	715	348	840	229	160	60	46	14	11
12	39	359	205	3.230	313	710	217	148	63	44	14	10
13	35	313	200	4.650	285	785	207	138	71	41	12	10
14	33	256	200	2.940	285	755	195	128	68	36	12	10
15	31	216	200	2.210	282	710	185	120	70	35	12	10
16	30	190	650	2.070	268	685	228	115	99	32	12	11
17	30	167	1.750	1.830	268	800	343	108	188	31	13	11
18	29	245	1.850	1.580	260	830	436	104	141	29	13	12
19	29	534	3.000	1.510	247	1.270	590	100	106	29	12	19
20	29	354	2.690	1.330	235	1.030	504	102	89	30	12	166
21	30	326	8.590	1.250	229	858	440	100	78	31	11	197
22	34	295	6.850	1.060	223	782	400	94	71	31	11	126
23	32	274	4.450	936	220	698	360	106	71	29	10	167
24	30	251	3.690	1.040	232	623	328	296	72	28	17	331
25	29	363	2.540	1.230	360	554	303	193	164	26	38	268
26	34	1.090	3.360	954	570	495	278	150	139	24	24	157
27	40	758	4.470	845	610	494	257	130	110	20	17	116
28	69	581	3.130	750	530	462	241	120	94	19	14	94
29	84	462	2.110	660	------	409	226	104	85	17	14	80
30	57	382	1.620	635	------	414	214	96	83	16	14	71
31	47	------	1.250	745	------	489	------	90	------	16	15	------
TOTAL	1.205	12.450	55.688	38.572	10.287	21.244	9.730	4.481	2.663	1.223	454	2.003.8
MEAN	38.9	415	1.796	1.244	367	685	324	145	88.8	39.5	14.6	66.8
MAX	84	1.090	8.590	4.650	635	1.270	590	296	188	78	38	331
MIN	29	57	200	384	220	409	185	90	60	16	10	8.3
AC-FT	2.390	24.690	110.500	76.510	20.400	42.140	19.300	8.890	5.280	2.430	901	3.970

CAL YR 1972 TOTAL 274.962.0 MEAN 751 MAX 10.800 MIN 7.8 AC-FT 545.400
WTR YR 1973 TOTAL 160.000.8 MEAN 438 MAX 8.590 MIN 8.3 AC-FT 317.400

PEAK DISCHARGE (BASE, 5,700 CFS).--Dec. 21 (1230) 11,000 cfs (11.87 ft).

14193000 WILLAMINA CREEK NEAR WILLAMINA, OREG.

LOCATION.--Lat 45°08'35", long 123°29'35", in NE¼NW¼ sec.13, T.5 S., R.7 W., Yamhill County, on right bank 4.5 mi (7.2 km) north of Willamina and at mile 6.2 (10.0 km).

DRAINAGE AREA.--64.7 mi^2 (167.6 km^2).

PERIOD OF RECORD.--June 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 315 ft (96.0 m) above mean sea level (plane-table survey). Prior to Oct. 1, 1939, water-stage recorder at site on left bank at datum 1.00 ft (0.305 m) higher. Oct. 1, 1939, to Aug. 5, 1968, water-stage recorder at site on left bank at present datum.

AVERAGE DISCHARGE.--39 years, 261 ft^3/s (7.39 m^3/s), 54.78 in/yr (1,391 mm/yr), 189,100 acre-ft/yr (233 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,000 ft^3/s (113 m^3/s) Dec. 21, gage height, 8.96 ft (2.731 m); minimum, 10 ft^3/s (0.28 m^3/s) Sept. 17.

Period of record: Maximum discharge, 10,800 ft^3/s (306 m^3/s) Dec. 22, 1964, gage height, 13.54 ft (4.126 m), from rating curve extended above 3,400 ft^3/s (96.3 m^3/s) on basis of slope-area measurement at gage height 11.65 ft (3.551 m); minimum, 5.4 ft^3/s (0.15 m^3/s) July 15, 1967.

Flood of Mar. 31, 1931, reached a stage of about 12 ft (3.6 m) from information by local resident, discharge, 8,200 ft^3/s (232 m^3/s) from rating curve extended above 3,400 ft^3/s (96.3 m^3/s) on basis of slope-area measurement at gage height 11.65 ft (3.551 m).

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	32	166	486	298	392	237	107	48	37	15	14
2	24	57	169	448	274	402	214	102	49	35	15	13
3	23	113	149	400	255	357	198	99	47	33	14	13
4	22	348	133	353	237	325	186	96	45	32	14	12
5	22	168	124	325	221	290	174	92	43	32	14	11
6	19	123	116	288	208	291	163	91	41	32	14	12
7	19	148	105	258	194	257	153	88	41	31	15	16
8	19	153	100	237	183	236	146	97	41	30	15	14
9	19	165	97	221	178	225	139	99	41	29	14	13
10	23	250	95	212	185	316	132	93	39	27	15	12
11	23	180	92	253	171	306	125	85	38	27	14	11
12	21	135	92	769	163	290	121	79	44	26	14	11
13	19	119	90	1,320	152	318	124	73	41	24	13	11
14	19	100	90	957	147	300	113	69	41	23	13	11
15	18	87	90	769	141	280	109	66	41	20	12	12
16	18	79	120	757	136	273	127	64	50	21	13	11
17	18	72	384	726	137	260	172	62	64	21	15	11
18	18	140	509	663	131	268	231	59	52	21	14	13
19	18	227	755	601	125	400	289	59	46	21	13	19
20	18	155	1,060	562	120	383	237	59	41	22	12	65
21	20	168	3,190	527	116	360	208	57	38	22	12	77
22	20	150	2,310	470	112	331	188	56	36	21	12	73
23	19	138	1,710	425	108	307	172	66	37	22	13	91
24	19	123	1,470	554	107	284	159	88	42	21	27	151
25	18	280	1,090	527	248	262	148	67	62	20	27	88
26	21	501	1,470	460	245	240	139	62	53	18	18	57
27	22	350	1,830	413	254	242	130	58	46	17	16	45
28	40	277	1,360	372	230	222	123	57	41	17	15	37
29	33	224	940	335	------	206	118	53	39	15	14	33
30	26	189	729	344	------	202	112	50	38	15	14	30
31	24	------	582	337	------	230	------	49	------	15	15	------
TOTAL	668	5,251	21,217	15,369	5,076	9,055	4,887	2,302	1,325	747	461	987
MEAN	21.5	175	684	496	181	292	163	74.3	44.2	24.1	14.9	32.9
MAX	40	501	3,190	1,320	298	402	289	107	64	37	27	151
MIN	18	32	90	212	107	202	109	49	36	15	12	11
CFSM	.33	2.70	10.6	7.67	2.80	4.51	2.52	1.15	.68	.37	.23	.51
IN.	.38	3.02	12.20	8.84	2.92	5.21	2.81	1.32	.76	.43	.27	.57
AC-FT	1,320	10,420	42,080	30,480	10,070	17,960	9,690	4,570	2,630	1,480	914	1,960

CAL YR 1972 TOTAL 114,992 MEAN 314 MAX 4,720 MIN 11 CFSM 4.85 IN 66.12 AC-FT 228,100
WTR YR 1973 TOTAL 67,345 MEAN 185 MAX 3,190 MIN 11 CFSM 2.86 IN 38.72 AC-FT 133,600

PEAK DISCHARGE (BASE, 2,300 CFS).--Dec. 21 (0600) 4,000 cfs (8.96 ft).

14193300 MILL CREEK NEAR WILLAMINA, OREG.

LOCATION.--Lat 44°58'15", long 123°26'55", in NE¼NW¼ sec.17, T.7 S., R.6 W., Polk County, on left bank 0.2 mi (0.3 km) upstream from bridge, 0.7 mi (1.1 km) downstream from South Branch, 7.5 mi (12.1 km) south of Willamina, and at mile 11.5 (18.5 km).

DRAINAGE AREA.--27.4 mi² (71.0 km²).

PERIOD OF RECORD.--July 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 562.02 ft (171.304 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--15 years, 140 ft³/s (3.96 m³/s), 69.39 in/yr (1,763 mm/yr), 101,400 acre-ft/yr (125 hm³/yr).

EXTREMES.--Current year. Maximum discharge, 3,050 ft³/s (86.4 m³/s) Dec. 21, gage height, 8.17 ft (2.490 m); minimum, 3.0 ft³/s (0.085 m³/s) Sept. 6, 13, 14, 16, 17.

Period of record: Maximum discharge, 6,170 ft³/s (175 m³/s) Dec. 22, 1964, gage height, 11.47 ft (3.496 m); minimum, 2.6 ft³/s (0.074 m³/s) Sept. 8, 1958.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1718: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	9.9	43	164	110	224	87	32	19	14	4.8	3.8
2	7.6	28	48	146	105	241	83	30	18	13	4.8	3.4
3	7.4	72	45	129	95	201	76	29	18	12	4.8	3.2
4	7.2	194	41	112	90	176	69	28	17	12	4.6	3.2
5	7.4	103	36	103	85	151	64	27	16	12	4.6	3.0
6	6.6	105	34	92	80	153	59	27	15	11	4.4	3.3
7	6.4	136	32	83	76	133	55	26	15	11	4.4	4.2
8	6.3	118	30	76	66	115	51	29	14	11	4.4	4.1
9	6.3	115	29	71	62	101	47	29	14	10	4.4	3.7
10	6.8	176	28	70	68	146	45	28	14	9.6	4.4	3.3
11	6.8	113	28	138	68	172	42	26	13	9.2	4.4	3.1
12	6.8	76	27	1.000	66	162	40	25	14	8.8	4.2	3.1
13	6.6	64	27	1.150	61	162	39	23	14	8.4	4.2	3.1
14	6.5	52	27	589	61	153	37	22	13	7.7	4.2	3.1
15	6.4	44	27	385	59	137	35	21	13	7.1	4.0	3.3
16	6.2	38	234	385	57	129	43	20	18	6.8	4.4	3.0
17	6.2	33	487	409	58	119	57	19	33	6.8	5.0	3.1
18	6.2	55	546	328	56	131	72	19	28	6.5	4.4	3.7
19	6.2	114	914	274	53	213	93	19	23	6.5	4.0	6.2
20	6.0	90	680	248	49	199	83	18	20	6.5	4.0	37
21	6.1	74	2.270	243	46	176	72	18	17	6.8	4.0	31
22	6.2	63	1.380	208	44	149	64	17	16	7.1	4.0	28
23	6.1	57	766	174	42	129	58	22	15	7.1	5.5	38
24	6.0	49	661	308	41	112	51	48	15	6.8	10	68
25	6.1	54	455	340	149	98	47	38	20	6.2	8.0	56
26	6.3	110	487	243	199	88	43	32	20	5.6	6.0	33
27	6.4	89	845	191	206	83	40	28	19	5.3	5.5	24
28	14	71	535	158	162	76	37	25	17	5.0	4.8	19
29	11	58	350	140	------	69	35	23	16	5.3	4.6	16
30	8.6	49	254	130	------	69	33	21	15	5.0	4.6	14
31	7.8	------	198	120	------	75	------	20	------	4.8	4.6	------
TOTAL	218.7	2.409.9	11.564	8.207	2.314	4.342	1.657	789	519	254.9	150.0	430.9
MEAN	7.05	80.3	373	265	82.6	140	55.2	25.5	17.3	8.22	4.84	14.4
MAX	14	194	2.270	1.150	206	241	93	48	33	14	10	68
MIN	6.0	9.9	27	70	41	69	33	17	13	4.8	4.0	3.0
CFSM	.26	2.93	13.6	9.67	3.01	5.11	2.01	.93	.63	.30	.18	.53
IN.	.30	3.27	15.70	11.14	3.14	5.89	2.25	1.07	.70	.35	.20	.59
AC-FT	434	4.780	22.940	16.280	4.590	8.610	3.290	1.560	1.030	506	298	855

CAL YR 1972 TOTAL 54.390.3 MEAN 149 MAX 3.120 MIN 3.9 CFSM 5.44 IN 73.84 AC-FT 107.900
WTR YR 1973 TOTAL 32.856.4 MEAN 90.0 MAX 2.270 MIN 3.0 CFSM 3.28 IN 44.61 AC-FT 65.170

PEAK DISCHARGE (BASE, 1,400 CFS).--Dec. 21 (1030) 3,050 cfs (8.17 ft); Jan. 12 (2130) 1,470 cfs (6.21 ft).

14194000 SOUTH YAMHILL RIVER NEAR WHITESON, OREG.

LOCATION.--Lat 45°10'08", long 123°12'25", in NW¼ sec.5, T.5 S., R.4 W., Yamhill County, near left bank on downstream side of Whiteson Bridge on State Highway 99W, 1.3 mi (2.1 km) northwest of Whiteson, 1.4 mi (2.3 km) downstream from Salt Creek, and at mile 16.71 (26.89 km).

DRAINAGE AREA.--502 mi² (1,300 km²).

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 82.30 ft (25.085 m) above mean sea level. Prior to Sept. 20, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--33 years, 1,779 ft³/s (50.4 m³/s), 48.13 in/yr (1,223 mm/yr), 1,289,000 acre-ft/yr (1.59 km³/yr).

EXTREMES.--Current year: Maximum discharge, 18,500 ft³/s (524 m³/s) Dec. 22, gage height, 41.83 ft (12.750 m); minimum, 11 ft³/s (0.31 m³/s) Aug. 23.

Period of record: Maximum discharge, 47,200 ft³/s (1,337 m³/s) Dec. 23, 1964, gage height, 47.20 ft (14.387 m); minimum, 3.2 ft³/s (0.091 m³/s) Aug. 24, 1967.

Flood of December 1937 reached a stage of 46.9 ft (14.30 m), from Oregon State Highway Department bridge plans.

REMARKS.--Records good. Slight regulation during low-water periods by logpond upstream. Many small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	90	682	3,630	1,470	2,140	1,660	695	193	141	23	33
2	87	155	621	2,860	1,740	3,340	1,360	666	188	130	23	37
3	80	292	654	2,660	1,580	2,730	1,210	643	185	116	23	32
4	77	996	569	2,310	1,620	2,340	1,100	628	179	107	22	29
5	73	1,650	507	2,020	1,290	2,050	1,070	608	169	102	23	27
6	68	729	688	1,820	1,190	1,890	937	382	155	101	24	25
7	66	828	666	1,570	1,090	1,750	857	372	145	94	23	25
8	60	889	620	1,360	1,000	1,550	792	366	141	89	23	27
9	59	710	610	1,220	963	1,370	762	420	137	90	22	42
10	63	1,160	610	1,130	934	1,530	696	415	136	86	22	40
11	68	1,190	610	1,230	1,020	2,130	650	386	127	76	21	31
12	72	787	600	3,550	926	1,910	615	357	122	70	24	26
13	73	605	600	7,930	876	1,950	603	326	130	75	24	25
14	68	533	600	10,700	817	1,940	571	306	137	66	16	26
15	64	438	600	9,160	788	1,740	560	288	132	58	15	25
16	62	379	672	7,100	756	1,620	536	264	134	52	15	25
17	62	330	1,280	6,610	720	1,760	720	253	231	46	16	25
18	61	314	3,950	5,640	726	1,630	943	236	322	41	20	28
19	59	285	5,200	5,180	680	2,520	1,450	230	235	43	20	33
20	58	859	6,000	4,350	668	3,020	1,360	222	192	45	18	43
21	58	659	7,960	4,020	615	2,640	1,150	236	166	48	20	320
22	60	663	17,600	3,470	596	2,290	1,000	226	135	52	17	326
23	63	565	15,900	2,920	580	1,950	843	225	126	55	13	303
24	61	536	14,000	2,760	553	1,770	805	365	129	52	23	356
25	60	498	11,900	3,770	961	1,580	742	463	152	45	53	657
26	59	1,430	9,110	3,240	1,830	1,410	687	337	216	42	71	380
27	60	1,830	8,060	2,650	2,210	1,300	632	291	221	40	53	257
28	75	1,790	11,400	2,270	1,820	1,340	590	266	174	38	40	188
29	130	1,550	9,810	1,980	------	1,250	559	263	152	33	36	162
30	137	810	6,990	1,780	------	1,170	526	216	142	30	33	137
31	101	------	6,820	2,230	------	1,160	------	202	------	25	33	------
TOTAL	2,246	27,996	163,130	112,700	30,406	58,710	25,729	11,132	5,075	2,119	763	5,502
MEAN	72.5	933	5,262	3,635	1,086	1,894	858	359	169	68.4	24.6	183
MAX	137	1,830	17,600	10,700	2,210	3,340	1,660	695	322	141	71	657
MIN	58	90	600	1,130	553	1,160	526	202	122	25	13	25
CFSM	.14	1.86	10.5	7.24	2.16	3.77	1.71	.72	.34	.14	.05	.36
IN.	.17	2.07	12.09	8.35	2.25	4.35	1.91	.82	.38	.16	.06	.41
AC-FT	4,450	55,530	323,600	223,500	60,310	116,500	51,030	22,080	10,070	4,200	1,510	10,910

CAL YR 1972 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN 17 CFSM [illegible] IN [illegible] AC-FT [illegible]
WTR YR 1973 TOTAL [illegible] MEAN [illegible] MAX 17,600 MIN 13 CFSM [illegible] IN [illegible] AC-FT [illegible]

PEAK DISCHARGE (BASE, 11,000 CFS).--Dec. 22 (1500) 18,500 cfs 41.83 ft.

14194300 NORTH YAMHILL RIVER NEAR FAIRDALE, OREG.

LOCATION.--Lat 45°21'55", long 123°22'40", in SW¼ sec.25, T.2 S., R.6 W., Yamhill County, on right bank 0.4 mi (0.6 km) downstream from small tributary, 1.3 mi (2.1 km) upstream from Kutch Creek, 2.1 mi (3.4 km) west of Fairdale, 9.5 mi (15.3 km) west of Yamhill, and at mile 28.4 (45.7 km).

DRAINAGE AREA.--9.03 mi^2 (23.39 km^2).

PERIOD OF RECORD.--October 1958 to March 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m), from topographic map.

AVERAGE DISCHARGE.--13 years (1958-65, 1967-73), 49.7 ft^3/s (1.41 m^3/s), 74.74 in/yr (1,898 mm/yr), 36,010 acre-ft/yr (44.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 711 ft^3/s (20.1 m^3/s) Dec. 21, gage height, 5.09 ft (1.551 m); minimum, 2.7 ft^3/s (0.076 m^3/s) Sept. 16, 17.

Period of record: Maximum discharge, 2,330 ft^3/s (66.0 m^3/s) Dec. 22, 1964, gage height, 6.88 ft (2.097 m), from rating curve extended above 1,000 ft^3/s (28.3 m^3/s); maximum gage height, 9.7 ft (2.96 m) Dec. 23, 1964 (backwater from debris); minimum discharge, 2.3 ft^3/s (0.065 m^3/s) Sept. 23-26, 1965.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	10	28	84	48	67	40	22	11	9.1	4.6	3.9
2	5.0	12	30	76	45	71	39	20	11	8.7	4.2	3.7
3	5.0	20	27	67	43	66	37	20	11	8.3	4.2	3.4
4	4.7	38	25	59	41	59	35	19	10	8.0	4.2	3.2
5	4.6	24	24	55	38	55	34	19	9.9	8.0	4.2	3.0
6	4.4	23	23	49	37	56	32	18	9.5	8.0	4.4	3.2
7	4.4	27	22	45	35	49	31	18	9.5	8.0	4.4	3.5
8	4.4	24	20	42	33	46	29	22	9.5	7.7	4.4	3.4
9	4.9	28	19	40	36	44	28	22	9.5	7.3	4.4	3.2
10	5.1	30	18	38	35	42	27	20	9.1	7.0	4.4	3.0
11	5.4	30	17	42	33	57	25	18	8.7	7.0	4.4	2.9
12	5.2	25	16	111	32	56	24	17	9.9	6.7	4.2	3.0
13	5.0	23	15	264	31	55	23	16	9.5	6.4	3.9	3.0
14	5.1	20	15	177	31	52	22	15	9.5	6.1	3.7	3.2
15	5.1	18	15	130	30	49	22	14	9.1	5.8	3.7	3.2
16	5.1	16	23	117	29	68	29	14	13	5.6	3.7	2.9
17	5.1	19	67	108	30	66	35	13	18	5.4	4.2	3.0
18	5.2	24	126	102	29	51	63	13	13	5.3	3.7	3.6
19	5.3	28	191	93	28	62	65	13	11	5.6	3.5	4.3
20	5.3	23	116	87	27	97	60	13	10	5.4	3.5	11
21	5.4	23	536	81	26	55	37	17	8.5	5.8	3.7	13
22	5.4	21	366	77	25	52	36	17	8.7	5.8	3.7	14
23	5.4	21	258	66	26	49	36	19	8.1	5.8	3.8	16
24	5.6	20	259	68	25	47	52	18	10	5.6	4.0	16
25	5.8	40	193	85	47	45	55	19	14	5.3	4.4	17
26	6.7	90	229	76	68	43	28	14	12	5.1	4.0	11
27	7.0	66	326	68	51	43	26	13	11	5.0	4.0	9.5
28	11	48	230	61	47	41	25	13	9.0	5.0	4.0	9.3
29	8.3	38	168	56	------	38	23	12	8.8	5.0	4.0	8.7
30	7.1	33	171	56	------	38	22	11	8.5	5.0	4.0	8.5
31	6.6	------	90	51	------	47	------	11	------	5.0	4.0	------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1972 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]
WTR YR 1973 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]

PEAK DISCHARGE (BASE, [illegible]).--Dec. 21 [illegible] 711 cfs (5.09 ft).

14195500 HASKINS CREEK RESERVOIR NEAR MCMINNVILLE, OREG.

LOCATION.--Lat 45°18'40", long 123°21'15", in NW¼ sec.18, T.3 S., R.5 W., Yamhill County, on control tower 250 ft (76 m) upstream from dam on Haskins Creek, 11 mi (18 km) northwest of McMinnville, and at mile 5.1 (8.2 km).

DRAINAGE AREA.--6.88 mi^2 (17.82 km^2).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by city of McMinnville).

EXTREMES.--Current year: Maximum contents observed, 735 acre-ft (906,000 m^3) Mar. 1, 10, 11, elevation, 835.1 ft (254.54 m); no contents, Nov. 30 to Feb. 5.

Period of record: Maximum contents observed, 748 acre-ft (922,000 m^3) Nov. 17, 1954, elevation, 835.65 ft (254.706 m); no contents most of time during winter months.

REMARKS.--Reservoir is formed by earthfill dam equipped with five siphon spillways which act as overflow weirs until priming occurs, approximately 835.5 ft (254.66 m) elevation. Capacity of reservoir is 733 acre-ft (904,000 m^3) between elevations 761.5 ft (232.11 m), invert of outlet tunnel, and 835.0 ft (254.51 m), crest of siphon spillways. Dead storage negligible. Rated capacity of three siphons is 700 ft^3/s (19.8 m^3/s) each and remaining two siphons 350 ft^3/s (9.91 m^3/s) each. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be some temporary storage. Water is used for municipal supply of city of McMinnville.

COOPERATION.--Elevation and capacity table furnished by city of McMinnville, Water and Light Department.

REVISIONS.--WSP 1738: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	834.0	710	-
Oct. 31	830.5	635	-75
Nov. 30	-	0	-635
Dec. 31	-	0	0
CAL YR 1972	-	-	0
Jan. 31	-	0	0
Feb. 28	835.0	733	+733
Mar. 31	834.9	731	-2
Apr. 30	834.7	726	-5
May 31	834.4	719	-7
June 30	833.1	694	-25
July 31	830.0	624	-70
Aug. 31	834.8	728	+104
Sept. 30	834.6	723	-5
WTR YR 1973	-	-	+13

14196000 HASKINS CREEK BELOW RESERVOIR, NEAR MCMINNVILLE, OREG.

LOCATION.--Lat 45°18'40", long 123°20'55", in NE¼ sec.18, T.3 S., R.5 W., Yamhill County, on right bank 800 ft (244 m) downstream from Haskins Creek Reservoir, 11 mi (18 km) northwest of McMinnville, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--6.90 mi² (17.87 km²).

PERIOD OF RECORD.--October 1951 to current year. Maximum discharge for water year 1957, published in WSP 1518, has been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 707 ft (215 m) above mean sea level (topographic survey of 1955). Prior to Aug. 5, 1952, water-stage recorder at site 600 ft (183 m) upstream at different datum.

AVERAGE DISCHARGE.--22 years, 32.9 ft³/s (0.93 m³/s), 64.75 in/yr (1,645 mm/yr), 23,840 acre-ft/yr (29.4 hm³/yr), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum daily discharge, 287 ft³/s (8.13 m³/s) Dec. 21; minimum daily, 1.7 ft³/s (0.048 m³/s) June 30.
Period of record: Maximum discharge, 1,030 ft³/s (29.2 m³/s) Dec. 23, 1964, gage height, 5.98 ft (1.823 m), from floodmark, from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurement of peak flow; maximum daily, 515 ft³/s (14.6 m³/s) Jan. 21, 1972; minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 27, 28, 1966.

REMARKS.--Records good except those below 5 ft³/s (0.14 m³/s), which are fair. All records given herein include flow in pipeline which diverts 600 ft (183 m) above station for municipal supply of McMinnville. Flow regulated by Haskins Creek Reservoir (see station 14195500); during winter months reservoir is empty except when inflow exceeds capacity of outlet tunnel. Monthly figures adjusted for diversion from McGuire Lake in the Nestucca River basin.

COOPERATION.--Meter readings for diversion and elevations of Haskins Creek reservoir furnished by city of McMinnville.

REVISIONS.--WSP 1738: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.6	12	56	31	54	28	13	10	9.0	12	6.0
2	6.5	6.7	16	50	29	47	25	13	11	6.9	12	5.7
3	6.5	7.9	16	42	25	47	22	13	8.7	9.5	12	5.6
4	6.6	6.9	12	36	23	43	22	12	6.6	12	12	6.8
5	6.5	9.7	12	33	12	41	21	12	7.7	11	12	8.8
6	6.1	10	11	31	8.0	40	20	12	10	7.6	10	8.9
7	6.7	17	8.1	31	6.2	36	18	11	12	7.9	10	8.2
8	6.8	12	7.0	31	8.2	33	18	16	12	8.1	10	7.6
9	6.8	17	7.9	27	8.8	32	18	13	9.6	7.9	11	7.1
10	6.8	21	7.7	21	5.8	42	17	10	8.6	10	12	6.6
11	6.8	16	7.1	25	9.0	40	16	9.0	8.0	12	[illegible]	8.8
12	6.7	13	8.7	[illegible]	9.7	[illegible]	15	10	8.2	11	8.8	8.6
13	6.8	11	8.6	152	9.6	[illegible]	15	10	9.0	11	8.5	7.3
14	6.7	7.6	9.0	119	9.6	[illegible]	16	9.9	7.0	11	10	6.5
15	6.7	7.5	8.5	[illegible]	9.8	[illegible]	16	9.1	7.1	11	11	8.3
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	9.6	6.3	12	11	7.2
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	10	8.2	12	11	6.9
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	9.1	8.7	12	11	8.0
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	31	11	9.0	12	9.0	9.3
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28	12	10	12	8.9	13
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	9.7	11	9.2	11	9.7
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	7.0	12	9.1	11	9.3
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	9.6	10	8.6	11	11
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	9.7	9.2	9.6	9.2	10
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	9.2	7.2	10	9.7	11
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	7.6	8.8	12	9.3	7.6
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	7.6	8.3	13	9.8	8.6
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	7.3	8.0	11	7.8	9.8
29	[illegible]	[illegible]	[illegible]	[illegible]	------	[illegible]	16	7.9	8.5	13	7.7	9.8
30	[illegible]	[illegible]	[illegible]	[illegible]	------	[illegible]	16	8.6	1.7	12	7.8	9.8
31	[illegible]	------	[illegible]	[illegible]	------	[illegible]	------	8.2	------	12	7.8	------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1972 [illegible]

WTR YR 1973 [illegible]

† Adjusted for change in contents in Haskins Creek Reservoir and diversion from McGuire Lake.

14197000 NORTH YAMHILL RIVER AT PIKE, OREG.

LOCATION.--Lat 45°22'10", long 123°15'15", in NW¼ sec.25, T.2 S., R.5 W., Yamhill County, on right bank 500 ft (152 m) downstream from Turner Creek, 0.5 mi (0.8 km) southeast of Pike, 4.0 mi (6.4 km) northwest of Yamhill, and at mile 20.5 (33.0 km).

DRAINAGE AREA.--66.8 mi^2 (173.0 km^2).

PERIOD OF RECORD.--October 1948 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 192.66 ft (58.723 m) above mean sea level (Corps of Engineers bench mark). Prior to Aug. 21, 1950, water-stage recorder at datum 1.02 ft (0.311 m) higher.

AVERAGE DISCHARGE.--25 years, 242 ft^3/s (6.85 m^3/s), 49.20 in/yr (1,250 mm/yr), 175,300 acre-ft/yr (216 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,060 ft^3/s (115 m^3/s) Dec. 21, gage height, 7.96 ft (2.426 m); minimum, 6.1 ft^3/s (0.173 m^3/s) Sept. 6.

Period of record: Maximum discharge, 9,530 ft^3/s (270 m^3/s) Dec. 21, 1955, gage height, 12.42 ft (3.786 m), from rating curve extended above 2,600 ft^3/s (73.6 m^3/s), on basis of slope-area measurement of peak flow; minimum, 1.7 ft^3/s (0.048 m^3/s) Sept. 3, 1972.

REMARKS.--Records good. Seasonal regulation by Haskins Creek Reservoir (see station 14195500); occasional diurnal fluctuation caused by Haskins Creek Dam and smaller dams upstream. Water supply for city of McMinnville is diverted from Haskins Creek above station and that for city of Yamhill is diverted from Turner Creek above station. Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	26	105	437	253	498	171	86	34	23	9.8	12
2	12	30	109	413	236	469	161	81	34	22	10	11
3	12	66	100	365	222	404	153	76	32	19	9.6	10
4	12	131	91	317	209	356	146	77	32	19	9.6	9.6
5	9.7	80	87	280	190	312	140	76	30	19	9.8	7.1
6	9.1	91	80	256	165	312	132	73	30	19	11	7.1
7	9.2	[illegible]	78	233	155	266	125	71	30	19	11	11
8	9.0	91	76	216	147	263	120	67	28	18	10	11
9	10	125	72	200	151	229	116	63	28	18	11	13
10	14	146	70	196	150	306	111	77	26	16	11	12
11	15	113	70	236	160	266	105	67	26	16	11	9.6
12	16	88	68	815	144	260	102	60	30	15	11	8.8
13	13	83	68	1,460	136	255	90	56	30	15	11	8.2
14	13	73	68	900	132	233	95	51	20	14	12	8.8
15	12	60	66	726	127	222	92	49	27	13	12	13
16	12	56	125	716	123	211	111	46	33	13	12	14
17	12	60	560	636	123	203	146	44	44	13	14	15
18	13	76	812	670	110	222	177	40	40	12	16	17
19	13	123	1,020	566	116	253	166	42	35	12	13	21
20	13	93	612	562	109	373	165	42	26	12	12	30
21	17	110	[illegible]	[illegible]	117	[illegible]	147	41	25	13	12	36
22	17	166	[illegible]	413	[illegible]	263	136	[illegible]	22	13	12	[illegible]
23	16	137	[illegible]	376	[illegible]	[illegible]	129	[illegible]	23	14	13	[illegible]
24	15	129	[illegible]	[illegible]	[illegible]	227	123	[illegible]	[illegible]	13	[illegible]	[illegible]
25	15	[illegible]	[illegible]	[illegible]	[illegible]	211	[illegible]	[illegible]	[illegible]	12	[illegible]	41
26	16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	117	[illegible]	[illegible]	11	11	21
27	18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.8	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	9.8	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	------	[illegible]	[illegible]	[illegible]	[illegible]	11	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	------	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	------	[illegible]	[illegible]	------	[illegible]	------	[illegible]	------	[illegible]	[illegible]	------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1972 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]
WTR YR 1973 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]

[illegible]

WILLAMETTE RIVER BASIN

14198000 WILLAMETTE RIVER AT WILSONVILLE, OREG.

LOCATION.--Lat 45°17'57", long 122°45'00", in SE¼NE¼ sec.24, T.3 S., R.1 W., Clackamas County, on left bank, 0.2 mi (0.3 km) downstream from Boeckman Creek, 1.1 mi (1.8 km) downstream from bridge on Interstate Highway 5 at Wilsonville, and at mile 37.4 (60.2 km).

DRAINAGE AREA.--8,400 mi² (21,800 km²), approximately.

PERIOD OF RECORD.--October 1948 to July 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 1, 1954, nonrecording gage at Butteville, 5.9 mi (9.5 km) upstream at same datum. Oct. 1, 1954, to Nov. 2, 1970, at site 1.1 mi (1.8 m) upstream at same datum.

AVERAGE DISCHARGE.--24 years (1948-72), 28,900 ft³/s (818 m³/s), 21,000,000 acre-ft/yr (25.9 km³/yr).

EXTREMES.--Maximum daily discharge during period October 1972 to July 1973, 99,300 ft³/s (2,810 m³/s) Dec. 23; minimum daily, 5,960 ft³/s (169 m³/s) July 31.

Period of record: Maximum discharge, 339,000 ft³/s (9,600 m³/s) Dec. 25, 1964, elevation, 94.74 ft (28.877 m); minimum daily, 3,600 ft³/s (102 m³/s) Nov. 29, 30, 1952.

Flood of Dec. 4, 1861, reached a stage of about 105 ft (32 m) at Wilsonville (discharge not determined).

REMARKS.--Records fair. Flow regulated by 12 reservoirs above station (see elsewhere in this report). Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,500	13,000	15,200	51,800	20,600	17,300	16,600	10,500	6,490	6,540		
2	13,500	13,800	14,100	44,400	19,700	19,600	18,600	10,200	6,610	6,500		
3	11,900	15,200	14,300	40,800	18,500	21,400	18,900	9,870	6,600	6,350		
4	10,600	16,900	15,800	37,700	17,400	20,600	17,900	9,680	6,430	6,240		
5	9,600	19,400	16,900	34,200	16,500	19,200	16,800	9,600	6,330	6,200		
6	9,110	20,700	17,300	31,200	15,900	18,300	15,900	9,360	6,180	6,160		
7	9,060	19,900	17,200	28,500	15,600	18,000	15,100	8,900	6,080	6,120		
8	9,020	19,600	17,500	26,100	15,100	17,200	14,600	8,830	6,030	6,120		
9	8,920	19,300	18,800	24,300	14,500	16,000	13,600	8,960	6,000	6,150		
10	9,120	19,200	18,900	23,400	13,900	15,700	13,000	9,200	6,070	6,140		
11	9,660	19,900	17,500	23,100	13,800	18,200	12,200	8,950	6,110	6,120		
12	10,200	20,200	17,000	27,300	13,700	20,600	11,300	8,410	6,390	6,110		
13	10,500	19,300	16,600	48,300	13,500	20,000	10,900	7,830	6,960	6,110		
14	10,500	18,300	16,800	77,500	13,200	19,000	10,900	7,310	6,920	6,110		
15	10,600	17,800	17,300	87,700	12,700	18,200	10,800	6,840	6,370	6,000		
16	10,600	17,100	10,100	72,000	12,400	17,300	10,600	6,900	6,190	6,060		
17	10,200	16,200	11,700	71,600	12,100	16,900	10,900	7,250	6,660	6,150		
18	10,200	15,500	26,600	76,600	12,100	17,200	12,600	7,230	8,820	6,270		
19	10,200	15,500	67,200	71,700	12,200	18,500	15,100	7,070	9,100	6,670		
20	10,100	15,900	56,200	62,900	12,100	22,100	17,100	7,050	8,590	6,760		
21	10,600	15,800	76,200	52,200	11,800	24,500	17,500	6,970	7,510	6,820		
22	11,900	15,200	93,600	44,700	11,500	23,200	16,800	6,760	6,810	6,820		
23	12,700	14,500	99,300	39,200	11,200	21,300	16,300	6,670	6,500	6,760		
24	12,800	13,500	95,700	36,900	10,900	19,700	15,700	6,950	6,290	6,600		
25	12,900	12,800	83,100	34,300	11,500	18,300	15,100	7,760	6,560	6,600		
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
29	[illegible]	[illegible]	[illegible]	[illegible]	------	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
30	[illegible]	[illegible]	[illegible]	[illegible]	------	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		------
31	[illegible]	------	[illegible]	[illegible]	------	[illegible]	------	[illegible]	------	[illegible]		
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

CAL YR 1972 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]

14198500 MOLALLA RIVER ABOVE PINE CREEK, NEAR WILHOIT, OREG.

LOCATION.--Lat 45°00'35", long 122°28'45", in NE¼NE¼ sec.31, T.6 S., R.3 E., Clackamas County, on right bank 0.5 mi (0.8 km) upstream from Pine Creek, 5 mi (8 km) southeast of Wilhoit, and at mile 32.5 (52.3 km).

DRAINAGE AREA.--97.0 mi^2 (251.2 km^2), at gaging cable 0.2 mi (0.3 km) downstream.

PERIOD OF RECORD.--October 1935 to current year.

GAGE.--Water-stage recorder. Datum of gage is 791.35 ft (241.203 m) above mean sea level (Bureau of Public Roads bench mark). Oct. 1, 1935, to Sept. 30, 1945, and Oct. 1, 1945, to Feb. 9, 1961, water-stage recorder at site 0.3 mi (0.5 km) downstream at datums 8.42 ft (2.566 m) and 10.44 ft (3.182 m) lower, respectively. Feb. 10, 1961, to July 21, 1966, water-stage recorder at site 0.2 mi (0.3 km) downstream at datum 5.99 ft (1.826 m) lower.

AVERAGE DISCHARGE.--38 years, 545 ft^3/s (15.4 m^3/s), 76.30 in/yr (1,938 mm/yr), 394,900 acre-ft/yr (487 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,990 ft^3/s (170 m^3/s) Dec. 21, gage height, 8.06 ft (2.457 m); minimum, 23 ft^3/s (0.65 m^3/s) Sept. 6, 16-18.
Period of record: Maximum discharge, 24,300 ft^3/s (688 m^3/s) Dec. 22, 1964, gage height, 16.3 ft (4.97 m), from floodmark, site and datum then in use, from rating curve extended above 5,200 ft^3/s (147 m^3/s); minimum, 18 ft^3/s (0.51 m^3/s) Oct. 3, 1965.

REMARKS.--Records good. No regulation or diversion above station. Records given herein are for measuring site.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	69	321	614	345	910	415	297	163	173	65	34
2	67	325	353	614	321	835	424	274	155	158	64	31
3	62	433	337	533	305	692	415	275	150	143	61	28
4	59	764	295	451	293	584	424	271	138	133	61	27
5	55	650	254	404	289	500	470	250	128	126	60	26
6	53	419	236	361	282	437	465	233	119	119	48	26
7	51	388	209	321	271	388	410	233	112	114	40	72
8	49	433	200	282	256	353	361	257	106	108	39	55
9	47	655	190	264	260	333	345	275	104	100	38	41
10	56	710	180	268	271	421	337	321	100	98	38	35
11	58	911	170	516	280	692	333	285	96	90	36	32
12	53	376	160	2,560	275	540	361	261	94	87	35	29
13	49	313	155	4,030	261	445	333	254	102	85	34	27
14	49	264	150	2,950	247	428	317	250	98	79	33	26
15	48	226	155	1,710	240	387	293	247	124	77	31	26
16	44	200	247	1,000	233	410	533	220	107	70	31	24
17	44	193	1,360	1,500	309	426	740	203	911	64	31	23
18	42	191	1,700	1,240	313	419	632	180	660	67	30	24
19	41	264	3,150	476	285	485	590	173	353	66	30	53
20	41	227	2,560	740	264	490	560	160	280	64	29	48
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	-------	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	-------	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	-------	[illegible]	[illegible]	-------	[illegible]	-------	[illegible]	-------	[illegible]	[illegible]	-------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1972 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]
WTR YR 1973 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]

PEAK DISCHARGE (BASE, [illegible]).--[illegible]

14200000 MOLALLA RIVER NEAR CANBY, OREG.

LOCATION.--Lat 45°14'40", long 122°41'10", in NW¼NE¼ sec.9, T.4 S., R.1 E., Clackamas County, on left bank at upstream side of Goods bridge, 1.5 mi (2.4 km) south of Canby, and at mile 6.01 (9.67 km).

DRAINAGE AREA.--323 mi² (837 km²).

PERIOD OF RECORD.--August 1928 to September 1959, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 104.00 ft (31.699 m) above mean sea level. Prior to Oct. 24, 1933, nonrecording gage and Oct. 24, 1933, to Sept. 26, 1955, water-stage recorder at present site and at datum 1.00 ft (0.305 m) higher. Sept. 27, 1955, to June 3, 1956, water-stage recorder at site 145 ft (44 m) downstream at present datum. June 4, 1956, to Sept. 30, 1959, water-stage recorder at site 0.3 mi (0.5 km) downstream at datum 1.98 ft (0.604 m) lower. Oct. 1, 1963, to May 4, 1964, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years, 1,155 ft³/s (32.71 m³/s), 48.56 in/yr (1,233 mm/yr), 836,800 acre-ft/yr (1.03 km³/yr).

EXTREMES.--Current year: Maximum discharge, 11,300 ft³/s (320 m³/s) Dec. 21, gage height, 9.26 ft (2.822 m); minimum, 48 ft³/s (1.36 m³/s) Aug. 23.
Period of record: Maximum discharge, 43,600 ft³/s (1,230 m³/s) Dec. 22, 1964, gage height, 16.76 ft (5.108 m); minimum, 20 ft³/s (0.57 m³/s) Aug. 27, 1959.

REMARKS.--Records good. No regulation. Numerous small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1248: 1929-30, 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	133	576	1,680	796	1,510	1,130	605	280	300	65	78
2	135	278	630	1,850	766	1,680	1,190	558	270	275	65	73
3	131	367	702	1,760	724	1,510	1,160	534	260	250	65	65
4	127	862	594	1,460	682	1,320	1,100	546	245	231	63	60
5	121	1,080	505	1,240	647	1,140	1,110	510	231	218	65	55
6	116	648	460	1,070	598	1,040	1,100	474	218	209	65	51
7	112	500	402	916	570	869	968	468	209	195	65	99
8	110	555	323	773	546	773	860	474	200	195	65	159
9	110	545	280	703	522	765	788	492	186	177	63	109
10	114	939	250	717	544	1,250	752	612	186	168	60	90
11	121	806	230	860	591	1,430	717	566	182	155	60	75
12	119	576	220	3,180	558	1,150	710	506	177	150	60	70
13	110	670	210	9,050	544	1,070	703	480	200	142	60	65
14	108	482	200	6,500	516	977	675	468	186	135	58	65
15	106	367	190	4,070	522	869	619	454	213	127	58	65
16	104	307	307	3,830	528	887	731	417	231	120	55	65
17	104	281	1,570	3,770	612	1,070	1,340	386	654	114	53	60
18	101	267	2,580	3,130	682	1,030	1,280	366	704	109	55	63
19	101	311	4,340	2,620	682	1,300	1,260	320	588	102	55	75
20	101	307	3,960	2,040	675	1,580	1,240	295	474	99	53	109
21	101	281	9,700	1,880	606	1,430	1,160	285	395	109	58	286
22	104	271	8,080	1,560	577	1,320	1,250	270	366	112	58	315
23	104	267	4,260	1,360	544	1,210	1,380	265	315	112	58	370
24	102	253	7,530	1,360	540	1,170	1,210	454	295	104	75	452
25	101	246	6,040	1,080	780	1,050	1,070	776	330	98	150	887
26	117	3,440	3,850	1,280	961	706	885	546	578	90	112	522
27	133	2,190	4,440	1,110	1,040	671	961	474	540	81	93	370
28	101	1,230	3,880	906	1,020	616	835	417	430	83	80	295
29	100	906	3,130	905	------	610	764	362	373	78	73	260
30	105	630	2,660	887	------	612	648	335	335	73	70	213
31	133	------	2,060	821	------	1,060	------	302	------	68	75	------
TOTAL	3,474	19,658	89,828	66,967	17,370	30,442	29,660	13,900	9,097	4,603	2,094	5,937
MEAN	112	655	[illegible]	[illegible]	620	[illegible]	989	449	330	149	67.5	198
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1972 [illegible]

WTR YR 1973 [illegible]

PEAK DISCHARGE [illegible]

14200300 SILVER CREEK AT SILVERTON, OREG.

LOCATION.--Lat 45°00'34", long 122°47'15", in NE¼ sec.34, T.6 S., R.1 W., on right bank 300 ft (91 m) downstream from railroad bridge in Silverton, 2.5 mi (4.0 km) upstream from Brush Creek, and at mile 3.4 (5.5 km).

DRAINAGE AREA.--47.9 mi^2 (124.1 km^2).

PERIOD OF RECORD.--October 1963 to September 1968, October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 218.5 ft (66.60 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 203 ft^3/s (5.75 m^3/s, 57.55 in/yr (1,462 mm/yr), 147,100 acre-ft/yr (181 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,090 ft^3/s (59.2 m^3/s) Dec. 21, gage height, 6.32 ft (1.926 m); minimum, 3.9 ft^3/s (0.11 m^3/s), Sept. 6.
Period of record: Maximum discharge, 5,900 ft^3/s (167 m^3/s) Dec. 22, 1964, gage height, 11.15 ft (3.399 m); minimum, 2.0 ft^3/s (0.057 m^3/s) Aug. 20, 21, 1967.

REMARKS.--Records good. No regulation. Several small diversions for irrigation and municipal use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	28	99	417	205	222	222	99	39	64	9.3	8.8
2	18	65	150	449	189	233	208	91	38	58	8.8	7.4
3	14	84	145	381	176	213	189	91	37	49	8.3	6.7
4	12	120	118	323	164	199	176	86	35	45	8.3	6.0
5	10	94	105	292	152	184	169	80	33	43	8.3	5.3
6	9.0	68	100	248	143	174	157	77	30	41	8.3	5.6
7	9.3	63	86	216	132	154	143	75	29	38	8.3	21
8	9.3	76	72	189	124	141	134	78	28	36	8.8	17
9	9.8	78	66	176	118	143	124	91	28	34	8.3	11
10	11	132	60	159	126	330	116	105	26	31	8.3	8.8
11	14	91	56	236	122	292	108	84	24	31	8.8	7.0
12	12	71	54	625	118	257	102	75	30	28	7.8	6.3
13	11	63	52	1,420	110	281	99	68	41	27	7.4	6.3
14	12	57	50	1,010	104	251	94	63	31	24	6.7	5.6
15	11	49	48	733	99	224	88	58	36	22	6.3	6.0
16	11	45	90	765	96	239	137	54	46	21	6.3	5.6
17	12	41	429	725	130	254	189	51	126	20	6.7	5.6
18	12	49	677	629	120	239	216	48	124	19	7.0	7.0
19	11	84	765	545	107	320	242	46	81	18	6.3	12
20	11	66	793	481	99	316	236	45	64	19	6.0	27
21	10	58	1,610	637	96	288	205	43	54	21	5.6	54
22	10	56	1,290	362	91	260	202	41	48	23	5.0	41
23	9.5	54	1,110	320	86	230	194	44	47	21	6.3	64
24	9.5	53	1,200	305	84	210	176	110	45	19	28	128
25	9.0	76	926	251	132	196	159	97	42	17	42	112
26	10	437	761	299	118	179	168	70	148	16	19	40
27	12	233	971	267	137	184	137	60	119	16	16	42
28	16	169	677	262	120	196	126	54	92	13	11	34
29	25	136	689	222	------	169	114	[illegible]	78	11	9.8	29
30	20	110	593	268	------	179	105	[illegible]	70	13	8.8	26
31	16	------	505	258	------	232	------	40	------	8.3	9.8	------
TOTAL	390.4	2,802	14,327	13,468	3,498	6,983	4,713	2,117	1,710	842.3	318.2	788.1
MEAN	12.6	93.4	462	434	125	225	157	68.3	57.0	27.2	10.3	26.3
MAX	25	437	1,610	1,420	205	330	242	110	148	64	42	128
MIN	9.0	41	48	159	84	141	88	40	24	8.3	5.0	5.3
CFSM	.26	1.95	9.65	9.07	2.61	4.70	3.28	1.43	1.19	.57	.21	.55
IN.	.30	2.18	11.13	10.46	2.72	5.42	3.66	1.64	1.33	.65	.25	.61
AC-FT	774	5,560	28,420	26,710	6,940	13,850	9,350	4,200	3,390	1,670	631	1,560

CAL YR 1972 TOTAL 93,339.6 MEAN 255 MAX 3,130 MIN 5.6 CFSM 5.32 IN 72.49 AC-FT 185,100
WTR YR 1973 TOTAL 51,860.5 MEAN 142 MAX 1,610 MIN 5.0 CFSM 2.96 IN 40.30 AC-FT 102,900

PEAK DISCHARGE (BASE, 1,300 CFS).--Dec. 21 (0600) 2,090 cfs (6.32 ft); Jan. 13 (1000) 1,680 cfs (5.86 ft).

14201500 BUTTE CREEK AT MONITOR, OREG.

LOCATION.--Lat 45°06'06", long 122°44'42", in SE¼SE¼ sec.25, T.5 S., R.1 W., Marion County, on left bank at downstream side of highway bridge at Monitor and at mile 7.7 (12.4 km).

DRAINAGE AREA.--58.7 mi² (152.0 km²).

PERIOD OF RECORD.--January to December 1936, October 1940 to September 1952, October 1966 to current year. Monthly discharge only for January to December 1936, published in WSP 1318.

GAGE.--Water-stage recorder. Altitude of gage is 155 ft (47.2 m) from topographic map. Jan. 20 to Oct. 22, 1936, nonrecording gage at present site at different datum. Oct. 23 to Dec. 19, 1936, nonrecording gage at site 70 ft (21 m) downstream at different datum. Oct. 1, 1940, to Sept. 30, 1952, nonrecording gage at present site at datum 151.35 ft (46.131 m) above mean sea level.

AVERAGE DISCHARGE.--19 years (1940-52, 1966-73), 224 ft³/s (6.34 m³/s), 51.82 in/yr (1,316 mm/yr), 162,300 acre-ft/yr (200 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,100 ft³/s (59.5 m³/s) Dec. 21, gage height, 8.49 ft (2.588 m); minimum, 0.75 ft³/s (0.021 m³/s) Aug. 5.

Period of record: Maximum discharge, 7,310 ft³/s (207 m³/s) Jan. 21, 1972, gage height, 15.26 ft (4.651 m), from floodmark; minimum, 0.15 ft³/s (0.004 m³/s) Aug. 25, 1967.

REMARKS.--Records good. No regulation. Diversions for irrigation by pumping above station.

REVISIONS.--WSP 2135: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	99	323	186	279	204	101	46	39	3.9	8.0
2	14	41	125	337	173	286	201	95	43	35	4.6	7.7
3	14	95	131	302	160	261	190	94	42	31	3.3	6.9
4	14	171	106	264	149	234	183	93	39	26	2.2	5.5
5	13	142	92	240	142	206	176	86	34	24	2.9	4.5
6	12	93	85	210	132	190	171	80	29	24	4.3	5.0
7	12	86	72	181	121	171	158	79	27	21	4.2	17
8	11	110	65	158	111	155	145	82	24	20	4.2	14
9	11	109	60	142	107	147	138	87	24	18	4.6	10
10	12	180	55	132	114	272	129	100	24	16	4.8	8.3
11	14	132	50	188	115	286	125	86	23	14	5.0	6.6
12	13	99	46	663	110	230	121	75	26	12	5.3	6.3
13	12	83	44	1,460	104	218	119	70	30	11	6.3	6.0
14	11	70	42	1,110	98	195	114	65	25	9.0	3.7	5.7
15	11	59	40	768	96	176	105	61	36	9.4	3.7	5.5
16	10	53	50	780	91	193	163	57	41	7.5	3.9	5.3
17	10	48	150	760	112	236	244	52	106	7.5	5.5	4.9
18	10	48	493	643	112	226	230	44	102	6.3	4.4	5.5
19	10	78	834	544	102	333	228	43	78	6.0	4.4	8.9
20	10	70	766	454	88	335	214	41	63	6.6	5.3	17
21	10	63	1,460	400	93	265	197	30	53	8.6	4.2	33
22	11	60	1,440	337	88	244	204	38	47	13	5.0	38
23	11	57	1,280	285	85	230	201	40	44	13	5.5	47
24	10	53	1,370	323	86	212	181	171	42	10	6.6	100
25	10	60	935	325	197	197	169	137	38	8.3	21	94
26	13	343	882	281	156	181	152	99	40	6.6	16	55
27	16	260	826	253	231	163	142	81	47	6.3	11	38
28	20	176	748	228	178	166	132	73	56	5.7	9.3	38
29	30	141	595	220	------	164	118	63	48	6.0	6.8	35
30	21	116	475	216	------	168	118	55	43	6.5	6.3	35
31	18	------	382	210	------	[illegible]	------	50	------	5.1	6.6	------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1972 [illegible]

WTR YR 1973 [illegible]

PEAK DISCHARGE [illegible]

14202500 TUALATIN RIVER AT GASTON, OREG.

LOCATION.--Lat 45°26'11", long 123°10'07", in SE¼SW¼ sec.34, T.1 S., R.4 W., Washington County, on right bank 1.5 mi (2.4 km) west of Gaston, and at mile 63.9 (102.8 km).

DRAINAGE AREA.--48.5 mi² (125.6 km²).

PERIOD OF RECORD.--October 1940 to September 1956, October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 170 ft (52 m), by barometer. Prior to May 20, 1942, water-stage recorder at site 1.5 mi (2.4 km) downstream at datum 164.18 ft (50.042 m) above mean sea level. May 20, 1942, to Sept. 30, 1956, nonrecording gage at present site at different datum.

AVERAGE DISCHARGE.--17 years (1940-56, 1972-73), 197 ft³/s (5.58 m³/s), 142,700 acre-ft/yr (176 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,140 ft³/s (60.6 m³/s) Dec. 21, gage height, 15.28 ft (4.657 m); minimum, 7.0 ft³/s (0.20 m³/s) Aug. 4.

Period of record: Maximum discharge, 8,170 ft³/s (231 m³/s) Dec 21, 1955, gage height, 13.18 ft (4.017 m), site and datum then in use; minimum, 0.20 ft³/s (0.006 m³/s) Sept. 22, 23, 1951, Aug. 14, 15, Sept. 25, Oct. 8, 1952.

REMARKS.--Records good. Slight diurnal fluctuation caused by logponds upstream. Small diversions for irrigation above station. In 1949 city of Hillsboro began diverting about 5 ft³/s (0.14 m³/s) fo municipal supply. Some water is diverted from Roaring Creek upstream from Forest Grove municipal supply.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	14	71	285	178	259	140	76	31	22	9.8	17
2	23	37	90	270	169	244	132	73	34	20	9.4	17
3	19	56	86	243	162	243	125	72	33	16	9.4	16
4	16	159	76	222	157	227	121	68	32	15	9.4	16
5	22	113	64	206	148	206	115	66	27	14	9.4	14
6	23	84	75	189	163	198	110	65	25	15	11	14
7	23	101	60	174	138	180	105	67	25	15	10	19
8	24	105	50	162	130	168	103	76	22	14	10	16
9	25	97	67	167	132	161	98	73	24	15	9.4	16
10	25	138	65	148	136	202	94	69	23	11	11	17
11	25	111	63	165	133	208	96	65	23	11	12	14
12	25	80	61	443	129	192	87	61	26	21	12	17
13	25	65	60	1,170	123	187	86	57	25	20	12	19
14	25	52	38	727	121	175	80	52	22	16	11	20
15	24	42	37	487	117	167	79	60	23	17	10	21
16	23	38	80	490	114	161	97	65	28	15	13	21
17	22	34	299	397	117	[illegible]	127	62	57	15	17	22
18	22	40	350	347	115	161	166	61	46	14	16	26
19	23	87	891	330	112	210	169	62	31	14	16	27
20	24	56	629	293	107	203	157	63	27	16	16	40
21	24	95	1,710	278	103	195	163	63	22	16	16	53
22	24	53	1,290	262	98	186	130	60	16	17	15	57
23	24	51	918	236	95	179	119	67	18	18	15	50
24	23	40	1,010	226	94	168	112	72	22	17	23	100
25	22	84	845	313	198	158	105	53	42	15	29	75
26	[illegible]	207	[illegible]	[illegible]	200	190	99	[illegible]	30	17	22	45
27	22	168	1,290	[illegible]	231	[illegible]	92	66	38	11	20	34
28	50	105	1,050	221	209	[illegible]	68	66	26	10	18	33
29	[illegible]	118	[illegible]	208	-------	[illegible]	66	59	21	11	17	20
30	[illegible]	82	[illegible]	202	-------	[illegible]	68	56	21	11	17	29
31	26	-------	[illegible]	196	-------	[illegible]	-------	52	-------	11	17	-------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3,310	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	110	[illegible]	[illegible]	[illegible]	14.3	[illegible]
MAX	50	207	1,710	1,170	231	[illegible]	169	76	57	22	29	100
MIN	16	14	37	148	94	[illegible]	79	52	16	10	9.4	14
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WTR YR 1973 TOTAL [illegible] MEAN 119 MAX 1,710 MIN 9.4 AC-FT [illegible]

PEAK DISCHARGE (BASE, 1,500 CFS).--DEC. 21 (2300) 2,140 CFS (15.28 FT.)

14202850 SCOGGINS CREEK ABOVE HENRY HAGG LAKE, NEAR GASTON, OREG.

LOCATION.--Lat 45°30'06", long 123°15'06", in SW¼NW¼ sec.12, T.1 S., R.5 W., Washington County, on left bank 0.8 mi (1.3 km) upstream from Scoggins Valley Road, 2.3 mi (3.7 km) upstream from Sain Creek, and at mile 8.6 (13.8 km).

DRAINAGE AREA.--15.9 mi² (41.2 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (190 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,050 ft³/s (29.7 m³/s) Dec. 21, gage height, 5.32 ft (1.622 m); minimum, 1.5 ft³/s (0.042 m³/s) Aug. 22, Sept. 5, 10-17.

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	7.4	22	118	67	103	43	22	11	7.0	2.2	2.3
2	3.2	12	26	107	62	107	39	22	11	6.5	2.0	2.0
3	3.2	25	23	92	58	101	36	22	10	6.2	2.0	1.9
4	3.0	47	21	82	54	94	34	21	9.8	5.9	2.0	1.7
5	2.8	24	19	75	51	84	33	20	9.0	5.9	2.0	1.6
6	2.7	21	18	67	48	79	32	20	8.7	6.2	2.3	1.7
7	2.6	31	15	61	45	71	30	20	9.0	6.2	2.3	1.9
8	2.6	26	13	55	43	65	29	25	8.7	5.9	2.2	1.9
9	2.7	27	13	52	46	61	28	22	8.7	5.7	2.2	1.7
10	3.2	43	12	50	46	82	27	21	8.3	5.2	2.2	1.6
11	3.2	29	12	58	44	79	26	19	7.7	5.0	2.2	1.5
12	3.2	22	12	186	41	75	25	18	9.4	4.7	2.0	1.6
13	2.8	20	12	428	39	71	24	16	9.0	4.2	1.9	1.6
14	2.8	17	11	283	38	66	24	15	8.3	3.8	1.9	1.6
15	2.7	15	11	217	36	62	23	14	8.0	3.6	1.8	1.6
16	2.7	16	17	197	35	59	30	14	11	3.4	1.8	1.6
17	2.7	12	160	176	35	57	38	13	17	3.4	1.9	1.6
18	2.7	17	248	162	34	62	45	13	12	3.2	1.9	1.9
19	2.7	22	350	145	33	86	50	13	10	3.4	1.8	3.9
20	2.7	18	330	134	32	81	43	13	8.7	3.6	1.8	17
21	3.2	18	796	123	31	78	39	13	7.7	4.0	1.8	12
22	3.2	17	651	109	29	71	36	12	7.0	4.2	1.8	15
23	3.2	16	390	98	29	66	33	16	7.4	4.2	1.8	13
24	3.0	15	351	134	28	61	32	23	9.8	3.8	4.7	21
25	2.8	34	273	136	75	57	29	17	16	3.4	4.2	13
26	3.2	81	327	110	86	52	28	16	11	3.0	3.2	7.6
27	3.6	37	228	105	96	51	26	16	9.8	2.7	2.6	5.7
28	5.2	32	188	96	81	67	28	13	8.6	2.6	2.3	4.7
29	4.5	26	217	86	------	43	26	12	7.6	2.3	2.3	4.0
30	3.8	23	176	82	------	47	26	11	7.6	2.2	2.0	3.6
31	3.6	------	161	75	------	43	------	11	------	2.2	2.6	------
TOTAL	96.7	726.4	5,102	3,899	1,336	2,155	996	519	286.8	133.6	71.0	168.7
MEAN	3.12	24.2	165	126	47.7	69.5	33.2	16.7	9.56	4.31	2.29	5.62
MAX	5.2	81	796	428	96	107	50	25	17	7.0	4.7	21
MIN	2.6	7.4	11	50	28	43	23	11	7.0	2.2	1.8	1.5
CFSM	.20	1.52	10.4	7.92	3.00	4.37	2.09	1.05	.60	.27	.14	.35
IN.	.23	1.70	11.94	9.13	3.13	5.04	2.34	1.21	.67	.31	.17	.39
AC-FT	192	1,440	10,120	7,730	2,650	4,270	1,980	1,030	568	265	141	335

WTR YR 1973 TOTAL 15,490.2 MEAN 42.4 MAX 796 MIN 1.5 CFSM 2.67 IN 36.24 AC-FT 30,720

PEAK DISCHARGE (BASE, 600 CFS).--Dec. 21 (2200) 1,050 cfs (5.32 ft).

14202920 SAIN CREEK NEAR GASTON, OREG.

LOCATION.--Lat 45°28'50", long 123°14'40", in SE¼ sec.13, T.1 S., R.5 W., Washington County, on left bank 7.2 mi (11.6 km) northwest of Gaston and at river mile 1.5 (2.4 km).

DRAINAGE AREA.--10.3 mi² (26.7 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 320 ft (98 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 362 ft³/s (10.3 m³/s) Dec. 21, gage height, 4.90 ft (1.494 m); minimum, 0.08 ft³/s (0.002 m³/s) Sept. 16, 17.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Part of domestic water supply for city of Hillsboro is diverted above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.5	8.8	72	39	53	24	13	6.3	2.0	.21	.34
2	1.6	6.4	12	62	37	53	22	13	6.4	1.8	.13	.25
3	1.5	15	11	52	35	50	21	13	6.3	1.6	.13	.21
4	1.4	22	9.7	47	33	46	21	12	6.2	1.4	.13	.16
5	1.4	9.9	8.7	43	31	42	20	12	5.6	1.6	.16	.13
6	1.3	11	8.6	39	29	40	19	12	5.3	1.8	.21	.16
7	1.3	18	7.6	36	28	36	18	12	5.5	1.8	.21	.25
8	1.3	13	6.2	33	27	33	18	14	5.3	1.4	.21	.25
9	1.3	15	6.0	31	27	32	17	13	5.5	1.3	.21	.16
10	1.5	23	5.8	29	29	61	17	12	5.3	1.2	.21	.18
11	1.6	13	5.7	32	27	39	16	11	5.0	1.1	.21	.13
12	1.6	8.8	5.6	93	25	37	16	10	6.5	.98	.16	.13
13	1.4	7.9	5.4	176	23	36	15	9.7	5.8	.82	.16	.21
14	1.4	6.9	5.2	126	23	33	15	9.0	5.4	.82	.16	.25
15	1.3	6.0	5.0	104	22	31	15	8.5	5.3	.76	.13	.16
16	1.3	5.5	7.8	99	21	30	18	8.2	6.8	.70	.16	.18
17	1.3	5.1	60	91	21	29	23	7.8	9.6	.58	.16	.18
18	1.3	6.7	97	86	20	31	25	7.6	6.9	.58	.16	.21
19	1.3	9.7	157	80	20	66	27	7.8	5.3	.58	.13	.53
20	1.4	7.7	126	76	19	62	26	7.9	2.8	.70	.13	6.5
21	1.6	7.7	271	78	18	63	22	7.9	1.6	.82	.13	3.5
22	1.5	7.5	184	63	18	57	20	7.5	1.6	.98	.13	7.3
23	1.6	7.2	119	58	17	55	19	9.0	2.3	.98	.16	6.6
24	1.5	6.8	67	55	17	33	18	12	3.0	.82	.26	12
25	1.6	22	66	55	62	30	17	9.0	6.6	.66	1.1	6.3
26	1.5	30	90	71	67	28	16	8.3	5.1	.53	.68	5.7
27	1.6	20	179	64	52	27	15	7.5	3.5	.43	.36	2.3
28	2.3	16	164	57	66	25	15	7.5	2.5	.36	.30	1.9
29	2.0	11	110	50	------	26	16	8.0	2.2	.36	.25	1.7
30	1.8	9.6	92	66	------	25	16	8.3	2.2	.25	.25	1.8
31	1.8	------	81	63	------	25	------	8.7	------	.25	.30	------
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CFSM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IN.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WTR YR 1973 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] CFSM [illegible] IN [illegible] AC-FT [illegible]

[illegible]

NOTE.--No gage-height record Oct. 1 to Nov. 5.

14203000 SCOGGINS CREEK NEAR GASTON, OREG.

LOCATION.--Lat 45°27'32", long 123°09'16", on line between secs. 26 and 27, T.1 S., R.4 W., Washington County, on left bank 100 ft (30 m) upstream from bridge on State Highway 47, 1.7 mi (2.7 km) northwest of Gaston, and at mile 1.71 (2.75 km).

DRAINAGE AREA.--43.3 mi^2 (112.1 km^2).

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1963, published as Scoggin Creek near Gaston.

GAGE.--Water-stage recorder. Datum of gage is 168.92 ft (51.487 m) above mean sea level. Prior to Oct. 1, 1947, water-stage recorder at site 300 ft ([illegible] m) upstream at same datum. Oct. 1, 1947, to June 7, 1950, nonrecording gage at site 150 ft (46 m) upstream at same datum.

AVERAGE DISCHARGE.--33 years, 141 ft^3/s (3.99 m^3/s), 44.22 in/yr (1,123 mm/yr), 102,200 acre-ft/yr (126 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,720 ft^3/s (48.7 m^3/s) Dec. 21, gage height, 12.04 ft (3.670 m); minimum, 0.50 ft^3/s (0.014 m^3/s) Aug. 5.

Period of record: Maximum discharge, 5,320 ft^3/s (151 m^3/s) Dec. 21, 1955, gage height, 15.94 ft ([illegible] m); minimum, 0.10 ft^3/s (0.003 m^3/s) Aug. 28, Sept. 30, Oct. 1, 3, 1958, Aug. 23, 24, 1961.

REMARKS.--Records good. Some diurnal fluctuation caused by logponds above station. Diversions by pumping for irrigation above station. Part of domestic water supply for Hillsboro is diverted from Sain Creek above station.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	12	36	266	161	214	109	56	21	13	3.0	3.8
2	7.8	22	47	227	151	[illegible]	99	56	22	12	3.2	3.2
3	7.8	26	45	215	145	212	96	56	22	11	1.3	3.2
4	6.5	22	38	188	130	201	92	51	21	10	1.6	2.6
5	5.0	44	33	179	126	186	90	44	20	10	3.6	2.6
6	6.6	33	33	168	120	178	83	46	16	11	2.7	2.3
7	6.5	46	28	156	116	166	81	46	17	11	2.8	2.5
8	6.1	47	23	156	107	156	79	50	18	11	3.0	3.3
9	6.4	62	23	147	107	151	76	49	16	9.9	2.7	2.6
10	8.5	76	22	126	116	173	75	45	18	9.1	2.9	2.6
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	----	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	----	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	----	[illegible]	[illegible]	----	[illegible]	----	[illegible]	----	[illegible]	[illegible]	----
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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14203500 TUALATIN RIVER NEAR DILLEY, OREG.

LOCATION.--Lat 45°28'30", long 123°07'23", in NE¼NW¼ sec.24, T.1 S., R.4 W., Washington County, on left bank 5 ft (2 m) upstream from highway bridge, 1.0 mi (1.6 km) south of Dilley, 1.2 mi (1.9 km) downstream from Scoggins Creek, and at mile 58.81 (94.63 km).

DRAINAGE AREA.--125 mi^2 (324 km^2).

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1940 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 147.57 ft (44.979 m) above mean sea level. Prior to June 16, 1950, nonrecording gage at several sites within 200 ft (61 m) of present site at datum 4.00 ft (1.219 m) higher. June 16, 1950, to Aug. 10, 1966, water-stage recorder at present site at datum 4.00 ft (1.219 m) higher.

AVERAGE DISCHARGE.--34 years, 403 ft^3/s (11.41 m^3/s), 43.78 in/yr (1,112 mm/yr), 292,000 acre-ft/yr (360 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,920 ft^3/s (139 m^3/s) Dec. 21, gage height, 17.48 ft (5.328 m); minimum, 1.6 ft^3/s (0.045 m^3/s) Aug. 1.

Period of record: Maximum discharge, 17,100 ft^3/s (484 m^3/s) Dec. 22, 1964, gage height, 19.34 ft (5.895 m), from rating curve extended above 6,000 ft^3/s (170 m^3/s); minimum, 0.08 ft^3/s (0.002 m^3/s) Sept. 3, 1967.

REMARKS.--Records good except those for October to December, which are fair. Diurnal fluctuation caused by operation of millpond on Scoggins Creek above station. Diversions above station of approximately 3,000 acre-ft (3.70 hm^3) from J. W. Barney Reservoir on the Middle Fork of North Fork Trask River for municipal water supply and irrigation in Wapato Lake area.

REVISIONS.--WSP 1935: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	35	170	887	446	637	285	139	59	41	3.8	23
2	55	70	210	757	409	791	264	130	59	40	4.6	25
3	50	140	200	633	385	712	249	128	60	34	5.1	25
4	40	380	180	506	365	643	238	126	59	29	8.1	23
5	47	320	160	471	341	554	228	115	57	25	4.2	19
6	55	260	175	416	305	512	215	117	52	24	13	17
7	56	245	150	369	278	450	204	120	47	26	14	22
8	56	250	125	340	260	403	195	133	47	28	13	21
9	60	230	110	307	262	373	188	128	47	30	11	18
10	62	340	105	293	267	434	179	120	47	27	9.6	17
11	62	280	100	312	266	447	169	111	47	22	17	7.1
12	62	200	98	900	248	405	165	103	48	19	18	9.6
13	62	160	95	2,810	232	390	161	94	53	20	16	13
14	62	125	92	2,570	221	360	152	92	50	19	14	14
15	60	105	90	1,530	209	336	151	83	45	17	11	16
16	58	92	170	1,390	203	319	167	79	48	19	13	17
17	53	82	499	1,340	202	309	218	75	87	16	12	20
18	54	100	1,100	1,230	199	311	239	72	82	15	17	23
19	57	160	2,060	1,160	191	431	295	72	62	14	21	26
20	58	145	1,830	993	179	443	273	75	53	14	21	53
21	58	135	3,840	918	169	424	243	77	47	16	20	61
22	58	130	4,230	777	162	393	225	74	41	19	21	61
23	58	125	3,070	687	157	366	210	84	37	23	19	75
24	58	120	2,930	753	158	343	200	128	36	25	27	95
25	52	200	2,620	909	339	319	190	101	71	27	43	92
26	66	540	2,260	777	470	297	172	87	71	14	34	55
27	55	450	3,450	692	542	292	160	84	56	8.0	30	47
28	74	320	2,950	619	482	277	155	82	48	7.1	26	43
29	66	240	1,850	554	------	257	150	74	44	14	22	38
30	55	190	1,330	513	------	254	145	66	41	13	20	38
31	40	------	1,140	497	------	258	------	60	------	6.3	23	------
TOTAL	1,767	6,169	37,389	26,810	7,947	12,740	6,085	3,029	1,601	651.4	531.4	1,013.7
MEAN	57.0	206	1,206	865	284	411	203	97.7	53.4	21.0	17.1	33.8
MAX	74	540	4,230	2,810	542	791	295	139	87	41	43	95
MIN	40	35	90	293	157	254	145	60	36	6.3	3.8	7.1
CFSM	.46	1.65	9.65	6.92	2.27	3.29	1.62	.78	.43	.17	.14	.27
IN.	.53	1.84	11.13	7.98	2.37	3.79	1.81	.90	.48	.19	.16	.30
AC-FT	3,500	12,240	74,160	53,180	15,760	25,270	12,070	6,010	3,180	1,290	1,050	2,010

CAL YR 1972 TOTAL 185,158.9 MEAN 506 MAX 8,060 MIN 9.2 CFSM 4.05 IN 55.10 AC-FT 367,300
WTR YR 1973 TOTAL 105,733.5 MEAN 290 MAX 4,230 MIN 3.8 CFSM 2.32 IN 31.47 AC-FT 209,700

PEAK DISCHARGE (BASE, 4,000 CFS).--Dec. 21 (1900) 4,920 cfs (17.48 ft).

NOTE.--No gage-height record Oct. 2 to Dec. 14.

14204500 GALES CREEK NEAR FOREST GROVE, OREG.

LOCATION.--Lat 45°33'20", long 123°11'10", in SE¼ sec.21, T.1 N., R.4 W., Washington County, on left bank approximately 50 ft (15 m) downstream from Roderick road bridge, 0.1 mi (0.2 km) below Kelly Creek, 2.5 mi (4.0 km) southeast of town of Gales Creek, 4.5 mi (7.2 km) northwest of Forest Grove, and at mile 8.7 (14.0 km).

DRAINAGE AREA.--66.1 mi^2 (171.2 km^2).

PERIOD OF RECORD.--October 1940 to September 1956, October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 201.81 ft (61.512 m) above mean sea level. Prior to Sept. 13, 1941, at site 1.4 mi (2.3 km) downstream at datum 14.33 ft (4.368 m) lower. Sept. 13, 1941, to June 19, 1952, at downstream side of bridge at datum 1.44 ft (0.439 m) higher. June 20, 1952, to Jan. 3, 1956, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--19 years, 232 ft^3/s (6.57 m^3/s), 47.66 in/yr (1,211 mm/yr), 168,100 acre-ft/yr (207 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,020 ft^3/s (85.5 m^3/s) Dec. 21, gage height, 8.75 ft (2.667 m); minimum, 1.6 ft^3/s (0.045 m^3/s) July 28.

Period of record: Maximum discharge, 6,410 ft^3/s (182 m^3/s) Feb. 17, 1949, gage height, 10.90 ft (3.322 m), from floodmark, site and datum then in use; maximum gage height, 12.95 ft (3.947 m), from floodmark, Jan. 21, 1972; minimum discharge, 1 ft^3/s (0.028 m^3/s) Aug. 19, 1947.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	29	56	405	224	332	130	81	33	22	8.5	9.6
2	13	48	65	359	206	345	123	76	34	20	8.8	8.6
3	12	70	60	325	190	329	118	76	32	17	8.3	8.1
4	11	117	52	278	178	295	114	75	31	16	4.3	5.9
5	11	82	48	253	164	260	110	71	27	18	6.5	4.3
6	12	68	56	226	154	245	106	73	28	17	8.8	5.3
7	11	87	48	200	147	214	103	70	30	19	7.3	10
8	12	76	29	181	142	192	101	85	29	20	7.0	10
9	12	78	48	171	140	182	96	79	27	17	5.8	9.6
10	12	99	39	161	146	218	92	76	26	15	7.4	11
11	13	77	50	183	142	211	89	72	26	14	5.4	4.9
12	14	59	52	532	133	198	88	65	32	13	5.5	6.6
13	13	53	49	1,500	127	198	86	58	27	10	5.9	9.6
14	13	48	46	1,100	120	184	84	49	26	7.2	5.5	9.6
15	12	44	44	841	118	175	82	46	26	7.0	5.1	10
16	12	40	72	737	116	173	100	44	33	6.2	6.7	11
17	12	38	285	628	116	165	125	41	45	6.3	9.4	10
18	12	44	552	585	112	178	143	40	34	6.6	7.5	6.6
19	12	60	961	542	108	252	171	41	26	5.5	6.2	18
20	13	52	810	502	106	231	147	43	26	7.2	5.9	43
21	15	49	2,270	470	102	218	131	43	23	11	6.0	48
22	15	45	1,490	412	100	199	122	42	22	14	6.3	54
23	17	45	1,190	370	97	184	116	53	23	13	6.0	58
24	16	44	1,130	480	96	173	110	71	29	11	15	71
25	16	75	872	472	216	160	104	55	38	10	17	50
26	18	152	1,070	403	260	151	99	47	31	8.1	11	33
27	19	108	1,430	361	279	150	93	46	27	7.6	11	24
28	24	86	1,090	322	245	144	90	44	22	5.8	12	21
29	23	72	778	288	------	136	87	37	23	4.8	10	18
30	21	63	620	274	------	135	82	35	23	5.3	11	17
31	20	------	499	250	------	136	------	35	------	5.8	13	------
TOTAL	450	2,008	15,861	13,811	4,284	6,363	3,242	1,769	859	360.4	254.1	605.7
MEAN	14.5	66.9	512	446	153	205	108	57.1	28.6	11.6	8.20	20.2
MAX	24	152	2,270	1,500	279	345	171	85	45	22	17	71
MIN	11	29	29	161	96	135	82	35	22	4.8	4.3	4.3
CFSM	.22	1.01	7.75	6.75	2.31	3.10	1.63	.86	.43	.18	.12	.31
IN.	.25	1.13	8.93	7.77	2.41	3.58	1.82	1.00	.48	.20	.14	.34
AC-FT	893	3,980	31,460	27,390	8,500	12,620	6,430	3,510	1,700	715	504	1,200

CAL YR 1972 TOTAL 99,323.0 MEAN 271 MAX 4,200 MIN 1.9 CFSM 4.10 IN 55.90 AC-FT 197,000
WTR YR 1973 TOTAL 49,867.2 MEAN 137 MAX 2,270 MIN 4.3 CFSM 2.07 IN 28.06 AC-FT 98,910

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G.HT	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
12-19	1230	5.36	1,120	12-27	1130	6.14	1,520
12-21	1300	8.75	3,020	1-13	0930	6.52	1,710

14205800 DAIRY CREEK NEAR VERBOORT, OREG.

LOCATION.--Lat 45°33'20", long 123°03'40", in NW¼SE¼ sec.21, T.1 N., R.3 W., Washington County, near left bank on downstream side of highway bridge, 1.1 mi (1.8 km) east of Verboort, and at mile 8.3 (13.4 km).

DRAINAGE AREA.--147 mi^2 (381 km^2).

PERIOD OF RECORD.--October 1972 to current year (October, May to September only, each year).

GAGE.--Water-stage recorder. Altitude of gage is 150 ft (46 m), from topographic map.

EXTREMES.--Current year: Maximum discharge recorded, 110 ft^3/s (3.11 m^3/s) May 8, gage height, 3.95 ft (1.204 m); minimum recorded, 0.20 ft^3/s (0.006 m^3/s) Aug. 1.

REMARKS.--Records fair. No regulation. Numerous diversions for irrigation and log ponds upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								107	43	24	1.1	13
2								102	42	22	3.7	8.0
3								100	42	18	5.6	8.6
4								100	39	14	6.5	7.5
5								91	33	13	6.9	7.3
6								77	30	13	8.0	8.0
7								93	31	12	3.9	7.7
8								98	31	11	.98	11
9								103	29	13	1.5	9.8
10								93	33	11	2.5	9.0
11								88	37	9.0	2.6	8.4
12								82	22	7.3	4.9	7.5
13								74	27	6.5	6.2	7.1
14								68	32	5.2	3.2	7.5
15								62	31	4.9	4.1	8.2
16								58	31	4.9	3.2	9.3
17								53	38	.76	3.4	10
18								49	41	2.1	5.4	11
19								49	35	6.0	3.9	13
20								34	29	7.7	5.6	23
21								44	25	9.0	3.9	42
22								45	24	9.3	3.2	39
23								54	21	7.7	3.7	36
24								77	19	5.6	6.7	43
25								83	33	6.7	13	51
26								77	47	6.2	11	29
27								59	30	5.4	9.3	20
28								56	31	3.7	6.5	16
29					------			45	25	.98	7.1	14
30					------			29	23	3.2	7.3	13
31		------			------		------	40	------	3.7	7.5	------
TOTAL								2,190	963	266.84	162.38	497.9
MEAN								70.6	32.1	8.61	5.24	16.6
MAX								107	47	24	13	51
MIN								29	19	.76	.98	7.1
AC-FT								4,340	1,910	529	322	988

NOTE.--No gage-height record Oct. 1-31.

14206180 MCKAY CREEK NEAR HILLSBORO, OREG.

LOCATION.--Lat 45°32'25", long 123°00'11", in SE¼SW¼ sec.25, T.1 S., R.3 W., Washington County, on center upstream bridge pier of bridge on Hornecker Road, 1.5 mi (2.4 km) northwest of county courthouse in Hillsboro, and at mile 2.4 (3.9 km).

DRAINAGE AREA.--61.0 mi^2 (158.0 km^2).

PERIOD OF RECORD.--October 1972 to current year (October, May to September only, each year).

GAGE.--Water-stage recorder. Datum of gage is 126.53 ft (38.566 m) above mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum discharge recorded, 32 ft^3/s (0.91 m^3/s) May 25, gage height, 2.67 ft (0.814 m); minimum, 0.17 ft^3/s (0.005 -^{3}/s) Aug. 10, 11.

REMARKS.--Records excellent. No regulation. Many small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4							27	4.6	4.2	.56	.61
2	4.1							26	4.1	4.3	.65	.69
3	4.2							25	4.2	3.9	.36	.82
4	4.3							25	3.6	3.5	.43	.91
5	4.1							26	6.7	3.5	.30	.96
6	4.2							24	6.5	3.1	.27	.77
7	3.9							24	5.5	2.5	.24	.82
8	4.5							26	5.8	2.7	.19	.65
9	4.7							27	4.6	2.8	.19	.82
10	4.2							25	2.2	2.7	.19	1.5
11	3.9							23	2.7	2.2	.24	1.4
12	4.5							21	5.0	2.0	.30	.82
13	5.6							20	3.0	1.7	.33	.82
14	5.3							18	5.3	1.4	.36	.77
15	6.1							17	4.6	1.2	.33	1.3
16	6.0							15	5.2	1.1	.27	1.3
17	6.2							14	6.5	1.0	.43	1.8
18	6.4							12	9.4	.82	.43	1.9
19	6.7							11	9.1	.65	.43	1.9
20	7.5							12	7.1	.61	.61	2.7
21	7.8							13	5.1	.52	.61	5.5
22	8.0							14	3.6	.82	.43	9.9
23	9.2							13	3.0	1.2	.36	8.9
24	9.1							21	2.9	1.2	.56	11
25	8.9							29	3.4	1.2	.61	16
26	9.1							19	6.5	1.3	2.4	10
27	9.2							16	11	1.1	3.8	6.2
28	12							14	8.0	.96	2.3	4.6
29	12				------			13	6.0	.82	1.2	3.9
30	13				------			8.5	4.8	.69	.77	3.3
31	12	------			------		------	5.5	------	.65	.56	------
TOTAL	211.1							584.0	160.0	56.34	20.71	102.56
MEAN	6.81							18.8	5.33	1.82	.67	3.42
MAX	13							29	11	4.3	3.8	16
MIN	3.9							5.5	2.2	.52	.19	.61
AC-FT	419							1.160	317	112	41	203

14206500 TUALATIN RIVER AT FARMINGTON, OREG.

LOCATION.--Lat 45°26'50", long 122°56'58", in SE¼SE¼ sec.29, T.1 S., R.2 W., Washington County, on left bank at Harris bridge at Farmington, 5.0 mi (8.0 km) south of Hillsboro, and at mile 33.3 (53.6 km).

DRAINAGE AREA.--568 mi² (1,471 km²).

PERIOD OF RECORD.--October 1939 to March 1958. October 1972 to current year (October, May to September only, each year).

GAGE.--Water-stage recorder. Datum of gage is 100.42 ft (30.608 m) above mean sea level. Prior to Oct. 1, 1940, nonrecording gage at same site at datum 2.00 ft (0.610 m) higher. Oct. 1, 1940, to Mar. 30, 1955, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--19 years (1939-58), 1,355 ft³/s (38.4 m³/s), 981,000 acre-ft/yr (1.21 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 435 ft³/s (12.3 m³/s), May 1; minimum, 8.3 ft³/s (0.234 m³/s) Aug. 3.

Period of record: Maximum discharge during period October 1939 to March 1958, 24,200 ft³/s (685 m³/s) Dec. 22, 1955, gage height, 36.03 ft (10.982 m), from floodmark; no flow Aug. 4-7, Aug. 10 to Sept. 6, 1958.

Maximum stage since 1932, about 37 ft (11.3 m) Dec. 22 or 23, 1933.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Regulation due to log ponds and many small diversions by pumping for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120							435	167	100	9.5	47
2	110							419	166	90	9.2	50
3	110							401	163	83	9.2	51
4	105							397	163	76	10	45
5	100							394	154	70	10	43
6	98							390	138	66	10	41
7	95							360	123	75	11	43
8	95							375	117	65	11	62
9	95							409	117	60	12	59
10	95							413	117	52	12	57
11	95							385	120	48	15	53
12	94							363	121	42	14	51
13	90							340	115	38	13	42
14	95							289	115	40	13	37
15	100							285	117	42	19	39
16	100							260	115	38	19	41
17	95							239	136	22	19	44
18	90							218	208	19	17	53
19	92							201	213	22	15	64
20	95							195	166	18	14	89
21	98							188	139	15	15	163
22	100							200	118	15	20	252
23	105							205	117	14	21	275
24	110							255	117	14	30	289
25	115							378	120	15	60	352
26	115							351	190	18	101	345
27	115							289	211	17	93	216
28	120							267	174	16	76	154
29	120				------			250	143	11	62	126
30	125				------			218	120	8.8	53	102
31	130	------			------		------	181	------	8.8	50	------
TOTAL	3,222							9,550	4,300	1,218.6	842.9	3,295
MEAN	104							308	143	39.3	27.2	110
MAX	130							435	213	100	101	352
MIN	90							181	115	8.8	9.2	37
AC-FT	6,390							18,940	8,530	2,420	1,670	6,520

14207000 OSWEGO CANAL NEAR LAKE OSWEGO, OREG.

LOCATION.--Lat 45°23'20", long 122°43'10", in NW¼NW¼ sec.20, T.2 S., R. 1 E., Clackamas County, on left bank 0.4 mi (0.6 km) downstream from point of diversion on Tualatin River, 1.0 mi (1.6 km) upstream from Oswego Lake, and 3.5 mi (5.6 km) southwest of Oswego.

PERIOD OF RECORD.--October 1928 to current year. October 1951 to September 1970, Oswego Canal records were not published separately, but were combined with records for Tualatin River at West Linn.

GAGE.--Water-stage recorder. Datum of gage is 96.50 ft (29.413 m) above mean sea level. Prior to Nov. 15, 1928, nonrecording gage 800 ft (244 m) upstream at different datum. Nov. 15, 1928, to June 29, 1939, nonrecording gage 900 ft (274 m) downstream at datum about 1.0 ft (0.3 m) higher.

AVERAGE DISCHARGE.--45 years, 70.9 ft³/s (2.01 m³/s), 51,370 acre-ft/yr (63.3 hm³/yr).

EXTREMES.--Period of record: Maximum daily discharge, 6,000 ft³/s (170 m³/s) Dec. 23, 1933; no flow at times.

REMARKS.--Records good. Oswego Canal diverts water from Tualatin River in NW¼ sec.20, but diversion dam is in NE¼ sec.33, about 3 mi (5 km) downstream. Water used for recreational facilities and development of power below Oswego Lake and returned to Willamette River at that point.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	40	43	144	3.5	100	73	46	57	75	18	16
2	30	40	43	137	3.0	110	72	45	55	76	17	16
3	29	44	45	128	3.0	114	71	45	54	76	16	16
4	29	58	46	118	3.0	114	68	44	54	75	16	17
5	27	61	43	110	3.0	111	67	43	54	72	16	19
6	26	55	38	101	70	108	65	42	52	69	17	20
7	26	52	33	90	67	103	63	50	50	65	17	21
8	26	47	30	40	64	98	61	74	48	60	17	20
9	26	48	29	5.4	61	93	59	80	47	56	16	20
10	27	50	29	5.8	61	89	58	83	47	53	16	20
11	26	50	29	5.9	63	88	57	83	44	50	17	20
12	25	52	29	7.5	63	87	55	81	45	47	17	21
13	30	47	29	7.8	61	85	54	80	46	44	18	21
14	31	41	29	7.1	59	83	53	75	46	39	18	21
15	31	38	29	7.0	56	81	52	67	46	33	18	19
16	29	35	29	7.4	55	79	53	65	47	29	18	19
17	29	32	41	7.3	54	77	54	63	49	27	19	18
18	31	31	64	7.0	54	76	56	61	52	26	19	19
19	32	33	94	6.7	54	81	60	59	56	22	19	19
20	33	34	113	6.4	53	89	63	56	56	21	18	19
21	35	35	128	6.1	51	93	64	55	53	21	19	21
22	36	36	129	5.8	50	91	61	55	49	20	19	27
23	36	36	134	5.5	51	88	58	56	45	21	19	32
24	36	36	145	5.0	54	84	55	60	42	21	19	36
25	33	36	149	5.0	59	81	54	67	39	21	22	36
26	33	44	154	4.5	70	79	53	72	42	20	25	35
27	34	59	159	4.5	85	77	51	71	47	20	19	35
28	35	65	157	4.0	92	77	49	68	53	21	19	36
29	36	55	155	4.0	------	75	48	66	67	21	19	33
30	39	48	153	4.0	------	72	48	63	72	20	18	30
31	40	------	150	3.5	------	71	------	60	------	19	18	------
TOTAL	966	1,338	2,478	1,001.7	1,422.5	2,754	1,755	1,935	1,514	1,240	563	702
MEAN	31.2	44.6	79.9	32.3	50.8	88.8	58.5	62.4	50.5	40.0	18.2	23.4
MAX	40	65	159	144	92	114	73	83	72	76	25	36
MIN	25	31	29	3.5	3.0	71	48	42	39	19	16	16
AC-FT	1,920	2,650	4,920	1,990	2,820	5,460	3,480	3,840	3,000	2,460	1,120	1,390

CAL YR 1972 TOTAL 19,565.9 MEAN 53.5 MAX 164 MIN 2.1 AC-FT 38,810
WTR YR 1973 TOTAL 17,669.2 MEAN 48.4 MAX 159 MIN 3.0 AC-FT 35,050

14207500 TUALATIN RIVER AT WEST LINN, OREG.

LOCATION.--Lat 45°21'03", long 122°40'30", in SW¼ sec.34, T.2 S., T.1 E., Clackamas County, on left bank 300 ft (90 m) upstream from bridge on State Highway 212, 0.4 mi (0.6 km) west of West Linn city limits, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--706 mi² (1,829 km²).

PERIOD OF RECORD.--July 1928 to current year. Prior to October 1960, published as "near Willamette."

GAGE.--Water-stage recorder. Datum of gage is 85.61 ft (26.094 m) above mean sea level (levels by Corps of Engineers). Prior to June 12, 1941, nonrecording gage at datum 1.02 ft (0.311 m) higher.

AVERAGE DISCHARGE.--45 years, 1,523 ft³/s (43.13 m³/s), 29.30 in/yr (744 mm/yr), 1,103,000 acre-ft/yr (1.36 km³/yr), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 7,680 ft³/s (217 m³/s) Dec. 27, gage height, 10.50 ft (3.200 m); minimum, 3.4 ft³/s (0.96 m³/s), Aug. 2.

Period of record: Maximum discharge, 23,300 ft³/s (660 m³/s) Dec. 23, 1933, gage height, 17.72 ft (5.401 m); minimum daily, 0.20 ft³/s (0.006 m³/s) July 30 to Aug. 2, 1966.

REMARKS.--Records good. October 1951 to September 1970, all records published for this station included the daily flow of Oswego Canal. Oswego Canal diverts at point 5.0 mi (8.0 km) above station for development of power between outlet of Lake Oswego and Willamette River. Some regulation in low-water season by flashboards on crest of diversion dam for Oswego Canal. Several diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1014: 1943. WSP 1184: 1947: WSP 1248: 1941. WSP 1935: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	124	402	6.640	1.970	2.050	1.040	427	153	29	4.1	53
2	118	122	392	6.100	1.780	2.520	1.050	409	141	29	3.5	51
3	114	132	406	5.460	1.630	2.770	1.020	391	135	29	3.8	50
4	110	172	427	4.730	1.500	2.770	940	383	130	28	4.1	39
5	105	336	402	4.000	1.370	2.650	886	375	128	25	4.4	41
6	98	462	374	3.260	1.230	2.470	838	363	123	23	4.4	41
7	96	430	311	2.520	1.140	2.240	796	272	114	39	4.1	50
8	92	378	245	1.930	1.050	1.990	742	237	105	34	4.4	52
9	92	371	220	1.580	975	1.770	694	281	98	31	4.4	54
10	88	386	210	1.370	968	1.630	664	320	98	26	4.4	55
11	96	392	200	1.330	1.010	1.580	630	313	96	23	4.4	54
12	92	420	195	1.900	1.020	1.570	595	294	94	19	4.7	52
13	88	371	190	3.580	961	1.480	570	272	93	17	5.0	50
14	99	301	185	4.510	898	1.400	550	249	96	23	6.1	47
15	103	257	180	4.680	838	1.330	535	237	98	28	7.0	44
16	99	227	200	5.080	796	1.250	545	221	93	28	7.3	44
17	91	202	392	5.480	766	1.200	575	206	99	12	8.5	44
18	88	192	1.000	5.610	784	1.160	646	189	123	9.1	9.1	49
19	92	197	2.350	5.550	784	1.330	748	175	147	16	9.4	61
20	94	205	3.150	5.330	748	1.640	856	164	151	8.8	9.4	79
21	96	233	4.590	5.020	700	1.790	868	157	132	7.3	7.0	103
22	103	236	5.430	4.600	664	1.710	796	155	114	6.4	8.2	155
23	110	230	5.820	4.190	625	1.570	718	159	96	5.5	8.5	229
24	110	226	6.520	3.920	615	1.430	652	184	91	6.1	11	284
25	112	239	6.930	3.650	742	1.330	615	232	104	7.3	17	317
26	114	322	7.260	3.350	1.020	1.230	580	278	121	14	51	334
27	114	466	7.630	3.130	1.500	1.170	540	260	149	13	76	272
28	116	655	7.600	2.900	1.770	1.160	500	232	110	12	76	189
29	118	569	7.470	2.630	------	1.120	470	211	32	9.1	71	147
30	124	470	7.350	2.350	------	1.040	445	196	31	7.0	62	123
31	130	------	7.090	2.150	------	1.000	------	175	------	5.5	57	------
TOTAL	3.226	9.323	85.101	118.530	29.854	51.350	21.104	8.017	3.293	570.1	557.2	3.163
MEAN	104	311	2.745	3.824	1.066	1.656	703	259	110	18.4	18.0	105
MAX	130	655	7.630	6.640	1.970	2.770	1.050	427	153	39	76	334
MIN	88	122	180	1.330	615	1.000	445	155	31	5.5	3.5	39
AC-FT	6.400	18.490	168.800	235.100	59.220	101.900	41.860	15.900	6.530	1.130	1.110	6.270
MEAN†	135	355	2,825	3,856	1,117	1,746	762	321	160	58.4	36.3	129
CFSM†	.19	.50	4.00	5.46	1.58	2.47	1.08	.45	.23	.08	.05	.18
IN.†	.22	.56	4.61	6.29	1.65	2.85	1.20	.52	.25	.10	.06	.20
AC-FT†	8,320	21,140	173,720	237,090	62,040	107,360	45,340	19,740	9,530	3,590	2,230	7,660

CAL YR 1972 TOTAL 656,574.0 MEAN 1,794 MAX 14,300 MIN 11 AC-FT 1,302,000 MEAN† 1,847 CFSM† 2.62 IN.† 35.60 AC-FT† 1,340,810
WTR YR 1973 TOTAL 334,088.3 MEAN 915 MAX 7,630 MIN 3.5 AC-FT 662,700 MEAN† 964 CFSM† 1.37 IN.† 18.50 AC-FT† 697,750

† Adjusted for diversion of Oswego Canal.

14208600 TIMOTHY LAKE NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°06'50", long 121°48'35", in NE¼ sec.27, T.5 S., R.8 E., Clackamas County, Mount Hood National Forest, in intake structure 350 ft (107 m) upstream from dam on Oak Grove Fork, 0.4 mi (0.6 km) upstream from Anvil Creek, 14 mi (22.5 km) south of Government Camp, and at mile 15.8 (25.4 km).

DRAIANGE AREA.--53.8 mi^2 (139.3 km^2).

PERIOD OF RECORD.--May 1956 to current year. Prior to October 1957, published as Timothy Meadows Reservoir.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Portland General Electric Co.).

EXTREMES.--Current year: Maximum contents observed, 67,950 acre-ft (83.8 hm^3) Aug. 2-17, elevation, 3,191.6 ft (972.80 m); minimum observed, 51,550 acre-ft (63.6 hm^3) Dec. 18, elevation, 3,179.1 ft (968.99 m).

Period of record: Maximum contents observed, 68,800 acre-ft (84.8 hm^3) Oct. 3, 1967, elevation, 3,192.2 ft (972.983 m); minimum observed, 16,010 acre-ft (19.7 hm^3) Feb. 24, 1957, elevation, 3,144.5 ft (958.44 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway built by Portland General Electric Co. Usable storage began May 28, 1956. Capacity, 65,710 acre-ft (81.0 hm^3) at elevation 3,190 ft (972.3 m), normal maximum operating level. Usable capacity increased in 1966 water to 64,450 acre-ft (79.5 hm^3) between elevations 3,125.0 ft (952.50 m), invert of outlet pipe, and 3,192.0 ft (972.92 m), top of radial gates. Storage of 4,060 acre-ft (5.0 hm^3) below elevation 3,125.0 ft (952.50 m) not normally available for release. Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Elevations and capacity table furnished by Portland General Electric Co.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	3,189.8	65,440	-
Oct. 31	3,188.2	63,260	-2,180
Nov. 30	3,183.6	57,220	-6,040
Dec. 31	3,184.0	57,730	+510
CAL YR 1972	-	-	-4,730
Jan. 31	3,182.3	55,560	-2,170
Feb. 28	3,181.2	54,170	-1,390
Mar. 31	3,185.4	59,550	+5,380
Apr. 30	3,188.6	63,800	+4,250
May 31	3,189.9	65,570	+1,770
June 30	3,191.0	67,100	+1,530
July 31	3,191.5	67,800	+700
Aug. 31	3,191.5	67,800	0
Sept.30	3,191.0	67,100	-700
WTR YR 1973	-	-	+1,660

14208700 OAK GROVE FORK NEAR GOVERNMENT CAMP, OREG.

LOCATION.--Lat 45°06'50", long 121°48'50", in NE¼ sec.27, T.5 S., R.8 E., Clackamas County, Mount Hood National Forest, on right bank 0.1 mi (0.2 km) upstream from Anvil Creek, 0.3 mi (0.5 km) downstream from Timothy Lake, 14 mi (23 km) south of Government Camp, and at mile 15.5 (24.9 km).

DRAINAGE AREA.--54.4 mi^2 (140.9 km^2).

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 3,041.83 ft (927.150 m) above mean sea level (Portland General Electric Co. bench mark).

AVERAGE DISCHARGE.--17 years, 126 ft^3/s (3.57 m^3/s), 31.45 in/yr (799 mm/yr), 91,290 acre-ft/yr (113 hm^3/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 410 ft^3/s (11.6 m^3/s) Jan. 22, gage height, 2.96 ft (0.902 m); minimum, 28 ft^3/s (0.79 m^3/s) July 25; minimum daily, 32 ft^3/s (0.91 m^3/s) July 25, 26.

Period of record: Maximum discharge, 2,110 ft^3/s (59.8 m^3/s) Dec. 24, 1964, gage height, 3.93 ft (1.198 m), from rating curve extended above 290 ft^3/s (8.21 m^3/s) on basis of slope-area measurement of peak flow; minimum, 3.7 ft^3/s (0.10 m^3/s) Sept. 23, 1968; minimum daily, 9.6 ft^3/s (0.27 m^3/s) Sept. 22, 1968.

REMARKS.--Records good. Regulation by Timothy Lake (see station 14208600). No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	210	253	132	210	47	47	80	40	46	34	57
2	93	225	242	139	216	47	47	64	40	57	34	56
3	114	63	258	162	224	47	47	72	40	66	34	56
4	114	56	273	177	224	47	47	79	40	56	34	56
5	131	56	280	185	224	47	47	89	40	47	34	56
6	141	238	279	200	230	47	47	85	40	41	34	56
7	134	241	276	207	234	47	47	93	40	40	34	62
8	110	244	281	211	242	47	47	85	40	39	34	70
9	110	210	281	245	242	47	47	81	40	38	35	70
10	116	237	281	245	242	47	50	83	40	39	50	68
11	123	244	287	241	242	47	47	89	40	39	62	68
12	123	245	286	105	250	48	47	58	40	39	51	68
13	123	249	296	59	250	47	47	42	40	39	51	70
14	123	259	294	54	258	47	47	40	41	38	53	70
15	123	259	297	51	256	47	47	57	40	35	53	70
16	130	257	283	49	170	47	47	72	41	36	56	70
17	133	257	205	47	43	47	46	72	41	38	57	70
18	133	294	229	46	43	47	46	88	40	38	57	70
19	133	280	51	120	43	47	46	59	40	38	56	70
20	207	280	50	238	45	47	46	59	40	36	57	70
21	222	290	61	238	47	47	46	59	40	34	57	71
22	103	299	57	335	47	47	46	59	39	34	57	71
23	103	282	56	400	47	47	46	59	50	34	54	71
24	100	293	56	260	47	47	45	59	62	34	49	87
25	97	202	55	284	47	47	64	59	79	32	49	85
26	98	82	54	388	47	47	82	59	66	32	49	81
27	185	183	54	386	47	47	61	59	66	34	49	93
28	264	213	53	385	47	47	42	52	61	33	53	93
29	262	235	60	385	------	47	42	50	54	33	57	93
30	267	242	76	308	------	47	58	55	49	33	57	95
31	267	------	121	195	------	47	------	45	------	33	57	------
TOTAL	4.476	6.725	5.685	6.477	4.264	1.458	1.471	2.062	1.369	1.211	1.498	2.143
MEAN	144	224	183	209	152	47.0	49.0	66.5	45.6	39.1	48.3	71.4
MAX	269	299	297	400	258	48	82	93	79	66	62	95
MIN	91	56	50	46	43	47	42	40	39	32	34	56
AC-FT	8.880	13.340	11.280	12.850	8.460	2.890	2.920	4.090	2.720	2.400	2.970	4.250
MEAN†	109	123	192	174	192	134	120	95.3	71.4	50.4	48.3	59.7
CFSM†	2.00	2.26	3.53	3.20	3.53	2.46	2.21	1.75	1.31	.93	.89	1.10
IN.†	2.31	2.52	4.06	3.68	2.44	2.85	2.47	2.02	1.47	1.07	1.02	1.22
AC-FT†	6,700	7,300	11,790	10,680	7,070	8,270	7,170	5,860	4,250	3,100	2,970	3,550

CAL YR 1972 TOTAL 81,460 MEAN 223 MAX 564 MIN 50 AC-FT 161,600 MEAN† 216 CFSM† 3.97 IN.† 54.08 AC-FT† 156,870
WTR YR 1973 TOTAL 38,841 MEAN 106 MAX 400 MIN 32 AC-FT 77,040 MEAN† 109 CFSM† 2.00 IN.† 27.13 AC-FT† 78,700

† Adjusted for change in contents in Timothy Lake.

14209000 OAK GROVE FORK ABOVE POWERPLANT INTAKE, OREG.

LOCATION.--Lat 45°04'20", long 121°57'00", on line between secs.3 and 4, T.6 S., R.7 E., Clackamas County, Mount Hood National Forest, on right bank 0.2 mi (0.3 km) upstream from Spring Creek, 0.7 mi (1.1 km) upstream from Kink Creek, 1.0 mi (1.6 km) upstream from Portland General Electric Co. diversion dam, 24 mi (39 km) southeast of Estacada, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--126 mi² (326 km²), includes that of Spring Creek.

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as both Oak Grove Fork of Clackamas River at proposed intake, near Cazadero, and Oak Grove Fork of Clackamas River at intake, near Cazadero, May 1909 to September 1910, as Oak Grove Fork of Clackamas River at intake, near Cazadero, October 1910 to September 1921, and as Oak Grove Fork at Portland General Electric Power Co. intake, October 1921 to September 1929.

GAGE.--Water-stage recorder. Datum of gage is 2,052.31 ft (625.544 m) above mean sea level. May 21, 1909, to Nov. 17, 1911, nonrecording gage and Mar. 26, 1912, to Sept. 30, 1923, water-stage recorder, at various sites 0.7 mi (1.1 km) downstream, below Kink Creek, at different datum.

AVERAGE DISCHARGE.--64 years, 502 ft³/s (14.2 m³/s), 363,700 acre-ft/yr (448 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,340 ft³/s (37.9 m³/s) Dec. 21, gage height, 4.81 ft (1.466 m); minimum, 236 ft³/s (7.25 m³/s) many days in August.

Period of record: Maximum discharge, 5,000 ft³/s (142 m³/s) Jan. 7, 1923, gage height, 5.45 ft (1.661 m), site and datum then in use, from rating curve extended above 2,300 ft³/s (65.1 m³/s) on basis of peak discharge for other stations in Clackamas River basin; minimum, 236 ft³/s (6.68 m³/s) Oct. 15, 16, 18, 1931.

REMARKS.--Records excellent. Flow regulated since 1956 by Timothy Lake (see station 14208600). No diversion above station. Records include flow of Spring Creek.

REVISIONS (WATER YEARS).--WSP 1248: 1909, 1910(M), 1916, 1918, 1923, 1932. WSP 1935: 1914, 1921.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	540	515	515	524	391	342	401	300	287	260	274
2	360	540	509	509	524	376	338	381	300	291	260	274
3	370	540	515	515	530	372	338	386	300	305	260	274
4	365	560	521	515	530	367	338	401	296	291	260	274
5	387	560	560	503	524	362	342	401	296	287	260	274
6	398	540	560	540	524	362	347	396	291	278	260	274
7	398	520	580	520	524	357	342	401	291	278	260	287
8	370	491	580	520	530	352	342	406	291	274	256	287
9	365	497	580	500	530	357	347	391	291	274	256	282
10	370	479	560	520	530	396	352	396	287	274	265	282
11	376	485	560	480	530	381	360	391	287	274	287	282
12	387	485	560	500	530	372	380	367	291	274	269	282
13	381	491	560	729	530	372	400	347	287	274	269	282
14	381	491	560	680	530	367	380	347	287	274	269	282
15	381	491	560	591	530	362	380	362	291	269	274	278
16	387	491	580	597	474	367	400	376	305	269	274	278
17	392	485	600	545	338	362	440	367	328	269	278	278
18	392	485	650	521	326	362	420	386	314	269	274	282
19	392	503	645	533	324	362	386	352	296	269	274	282
20	449	521	680	645	324	357	376	347	291	269	274	291
21	509	521	1.160	624	324	352	376	342	291	265	274	296
22	370	521	916	680	328	352	391	338	287	265	274	300
23	360	509	844	743	324	347	391	338	296	265	274	309
24	360	515	813	645	328	347	381	352	305	265	282	338
25	355	552	715	597	362	347	396	347	328	265	274	324
26	365	571	631	708	362	347	416	338	319	260	269	296
27	431	515	631	694	367	347	406	328	314	260	269	309
28	552	515	565	687	367	342	372	324	309	260	269	305
29	533	509	515	687	------	338	367	314	296	260	274	305
30	539	509	503	631	------	347	372	319	291	260	274	305
31	520	------	515	518	------	347	------	309	------	260	274	------
TOTAL	12.550	15.432	19.243	18.192	12.470	11.169	11.218	11.251	8.956	8.434	8.346	8.686
MEAN	405	514	621	587	445	360	374	363	299	272	269	290
MAX	552	571	1.160	743	530	396	440	406	328	305	287	338
MIN	355	479	503	480	324	338	338	309	287	260	256	274
AC-FT	24.890	30.610	38.170	36.080	24.730	22.150	22.250	22.320	17.760	16.730	16.550	17.230

CAL YR 1972 TOTAL 253.018 MEAN 691 MAX 2.170 MIN 355 AC-FT 501.900
WTR YR 1973 TOTAL 145.947 MEAN 400 MAX 1.160 MIN 256 AC-FT 289.500

14209500 CLACKAMAS RIVER ABOVE THREE LYNX CREEK, OREG.

LOCATION.--Lat 45°07'30", long 122°04'20", in NE¼ sec.21, T.5 S., R.6 E., Clackamas County, Mount Hood National Forest, on right bank 0.1 mi (0.2 km) upstream from Three Lynx Creek, 0.25 mi (0.40 km) downstream from powerplant, 17 mi (27 km) southeast of Estacada, and at mile 47.8 (76.9 km).

DRAINAGE AREA.--479 mi^2 (1,241 km^2).

PERIOD OF RECORD.--April 1909 to December 1913, October 1921 to current year. Prior to October 1911 (monthly discharge only), published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,091.69 ft (332.747 m) above mean sea level (levels by Portland General Electric Co.). Apr. 23, 1909, to Jan. 4, 1914, nonrecording gage at about same site and datum. Nov. 1, 1921, to Dec. 27, 1924, water-stage recorder at present site at datum 0.91 ft (0.277 m) higher.

AVERAGE DISCHARGE.--56 years, 1,981 ft^3/s (56.1 m^3/s), 56.16 in/yr (1 426 mm/yr), 1,435,000 acre-ft/yr (1.77 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,800 ft^3/s (504 m^3/s) Dec. 21, gage height, 10.41 ft (3.173 m), minimum daily, 665 ft^3/s (18.8 m^3/s) Sept. 3.

Period of record: Maximum discharge, 68,200 ft^3/s (1,930 m^3/s) Dec. 22, 1964, gage height, 21.7 ft (6.61 m), from floodmark, from rating curve extended above 34,100 ft^3/s (966 m^3/s) on basis of slope-area measurement at gage height 15.06 ft (4.590 m); minimum, 324 ft^3/s (9.18 m^3/s) Oct. 17, 1958; minimum daily, 427 ft^3/s (12.1 m^3/s) Oct. 5, 1958.

REMARKS.--Records excellent except those below 500 ft^3/s (14.2 m^3/s), which are poor. Minor regulation since 1956 by Timothy Lake (see station 14208600). Considerable diurnal fluctuation during period of low flow.

REVISIONS (WATER YEARS).--WSP 1148: Drainage area. WSP 1248: 1910(M), 1912, 1948-50(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	920	1.000	1.460	2.310	1.660	2.370	1.270	1.500	992	854	695	675
2	896	1.320	1.470	2.270	1.620	2.270	1.240	1.490	986	848	680	675
3	890	1.300	1.450	2.110	1.590	2.070	1.220	1.510	974	902	685	665
4	884	1.870	1.410	1.920	1.590	1.880	1.220	1.580	944	782	690	670
5	878	1.990	1.400	1.880	1.580	1.760	1.290	1.500	926	770	690	670
6	866	1.660	1.300	1.750	1.570	1.660	1.370	1.460	902	788	685	670
7	872	1.530	1.300	1.660	1.530	1.570	1.340	1.460	890	782	690	725
8	854	1.510	1.400	1.530	1.500	1.510	1.310	1.520	878	770	690	715
9	860	1.520	1.500	1.730	1.480	1.500	1.320	1.530	866	760	680	705
10	872	1.870	1.500	1.650	1.500	1.980	1.350	1.550	854	755	680	670
11	878	1.660	1.400	1.670	1.470	2.010	1.420	1.460	842	750	690	675
12	860	1.480	1.180	3.930	1.460	1.820	1.490	1.420	848	745	690	680
13	848	1.400	1.140	11.100	1.430	1.750	1.630	1.400	854	735	695	725
14	848	1.340	1.130	7.970	1.420	1.660	1.610	1.540	842	735	695	755
15	842	1.270	1.140	5.600	1.380	1.570	1.540	1.570	872	720	690	735
16	842	1.210	1.180	5.400	1.350	1.570	1.790	1.550	974	715	675	715
17	842	1.180	2.540	5.200	1.250	1.570	2.200	1.460	1.440	740	685	735
18	836	1.170	4.210	4.800	1.300	1.520	2.010	1.400	1.350	725	685	730
19	836	1.190	9.230	4.000	1.230	1.550	1.870	1.310	1.190	730	675	735
20	926	1.190	7.460	3.500	1.150	1.500	1.770	1.250	1.110	730	680	782
21	884	1.180	14.600	3.200	1.200	1.460	1.680	1.190	1.030	725	680	878
22	812	1.150	9.670	2.800	1.180	1.430	1.780	1.130	986	715	675	860
23	794	1.150	7.900	2.450	1.160	1.380	1.870	1.110	962	715	675	998
24	788	1.130	7.710	2.390	1.180	1.350	1.800	1.390	950	710	725	1.360
25	788	1.650	5.970	2.270	1.570	1.340	1.750	1.420	998	710	720	1.390
26	924	3.880	4.470	2.240	1.760	1.340	1.780	1.270	1.010	705	690	1.000
27	926	2.460	4.600	2.130	1.900	1.320	1.850	1.180	974	705	680	902
28	1.010	1.970	4.100	2.050	1.850	1.300	1.750	1.160	938	700	675	824
29	992	1.720	3.300	1.980	-------	1.260	1.630	1.050	896	700	675	830
30	986	1.560	2.460	1.950	-------	1.250	1.560	1.060	878	685	680	818
31	986	-------	2.540	1.740	-------	1.240	-------	1.020	-------	700	685	-------
TOTAL	27.140	46.510	112.520	97.180	40.860	49.810	47.710	42.440	29.156	23.106	21.285	23.967
MEAN	875	1.550	3.630	3.135	1.459	1.607	1.590	1.369	972	745	687	799
MAX	1.010	3.880	14.600	11.100	1.900	2.370	2.200	1.580	1.440	902	725	1.390
MIN	788	1.000	1.130	1.530	1.150	1.250	1.220	1.020	842	685	675	665
AC-FT	53.830	92.250	223.200	192.800	81.050	98.800	94.630	84.180	57.830	45.830	42.220	47.540

CAL YR 1972 TOTAL 1.051.606 MEAN 2.873 MAX 24.000 MIN 788 AC-FT 2.086.000
WTR YR 1973 TOTAL 561.666 MEAN 1.539 MAX 14.600 MIN 665 AC-FT 1.114.000

14210000 CLACKAMAS RIVER AT ESTACADA, OREG.

LOCATION.--Lat 45°18'00", long 122°21'10", in NE¼ sec.19, T.3 S., R.4 E., Clackamas County, on left bank 0.2 mi (0.3 km) downstream from River Mill Dam, 1.5 mi (2.4 km) northwest of Estacada, and at mile 23.1 (37.2 km).

DRAINAGE AREA.--671 mi^2 (1,738 km^2).

PERIOD OF RECORD.--April 1908 to current year. Monthly discharge only April 1908, published in WSP 1318. Published as "near Cazadero" January 1909 to September 1957.

GAGE.--Water-stage recorder. Datum of gage is 296.93 ft (90.504 m) above mean sea level (levels by Portland General Electric Co.). See WSP 1738 for history of changes prior to Oct. 1, 1957. Oct. 1, 1957, to Feb. 16, 1965, water-stage recorder at same site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--65 years, 2,736 ft^3/s (77.5 m^3/s), 55.37 in/yr (1,406 mm/yr), 1,982,000 acre-ft/yr (2.44 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,800 ft^3/s (816 m^3/s) Dec. 21, gage height, 10.37 ft (3.161 m); minimum, 280 ft^3/s (7.93 m^3/s) Jan. 9.

Period of record: Maximum discharge, 86,900 ft^3/s (2,460 m^3/s) Dec. 22, 1964, gage height, 18.36 ft (5.596 m); minimum, 50 ft^3/s (1.42 m^3/s) Mar. 10, 1961, from rating curve extended below 260 ft^3/s (7.36 m^3/s); minimum daily, 285 ft^3/s (8.07 m^3/s) Oct. 4, 5, 1958, caused by filling of North Fork dam forebay.

REMARKS.--Records excellent. Large diurnal fluctuations and some regulation caused by powerplants at River Mill Dam and, since 1958, North Fork Dam. Minor regulation since 1956 by Timothy Lake (see station 14208600). Two small diversions above station for Oregon City and Estacada municipal water supply.

REVISIONS (WATER YEARS).--WSP 1248: 1908-9, 1910(M), 1916, 1917(M), 1922(M), 1923. WSP 1288: Drainage area (former site). WSP 1638: 1919(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	914	1,150	1,600	3,520	1,900	3,230	1,970	2,060	1,230	1,080	766	796
2	995	1,780	2,040	3,340	2,170	2,940	1,910	1,990	1,100	1,090	755	780
3	1,180	2,170	2,250	2,780	2,010	2,850	1,860	1,970	1,110	1,080	791	773
4	1,040	2,310	2,500	3,090	2,020	2,430	1,870	2,130	1,170	1,050	790	766
5	950	2,920	2,250	3,100	2,000	2,380	1,850	1,980	1,180	1,050	768	738
6	914	2,310	1,570	3,050	1,980	2,160	2,010	1,910	992	1,030	749	738
7	995	2,070	1,130	1,300	1,970	2,020	2,020	1,950	1,020	1,020	745	752
8	1,000	1,440	1,200	2,650	1,970	2,020	1,890	1,950	1,030	983	721	780
9	1,040	1,710	1,240	1,950	1,560	1,860	1,790	2,050	1,060	913	700	887
10	1,090	2,330	914	1,260	1,750	2,570	1,850	2,250	1,090	803	702	836
11	1,110	2,220	1,000	1,930	1,960	2,750	1,930	1,980	1,070	867	731	738
12	986	1,900	1,500	4,330	1,790	2,420	2,080	1,870	872	935	739	738
13	941	1,650	2,000	15,700	1,980	2,350	2,420	1,890	868	880	771	738
14	950	1,770	812	12,000	1,670	2,280	2,550	1,990	1,010	864	813	738
15	995	1,840	3,050	7,640	1,570	2,210	2,440	2,060	1,020	803	782	766
16	1,040	1,600	905	7,200	1,870	2,150	2,260	2,030	1,190	808	768	804
17	977	1,570	3,240	6,370	1,660	2,260	2,550	1,900	2,260	876	837	773
18	932	1,160	4,950	5,460	1,740	2,170	2,630	1,860	2,070	843	752	812
19	923	1,290	10,500	4,740	1,690	2,280	2,490	1,610	1,420	850	749	780
20	1,270	1,470	9,970	3,930	1,690	2,180	2,670	1,620	1,400	796	742	780
21	977	1,530	23,200	3,650	1,590	2,070	2,320	1,610	1,390	790	750	880
22	914	1,490	14,400	2,860	1,530	2,080	2,580	1,320	1,360	846	767	1,480
23	820	1,200	11,400	3,110	1,580	1,980	2,850	1,540	1,100	735	759	1,620
24	836	1,240	11,900	3,580	1,480	1,880	2,680	1,640	1,110	740	856	2,230
25	836	1,940	9,110	3,010	1,720	1,900	2,500	1,870	1,230	782	954	2,000
26	836	8,110	6,720	2,880	2,320	1,900	2,500	1,620	1,450	773	918	1,460
27	1,050	4,560	6,530	2,620	2,510	1,850	2,640	1,630	1,410	775	774	1,130
28	1,350	3,240	6,290	1,870	2,410	1,840	2,430	1,480	1,270	755	707	1,110
29	1,340	2,620	4,780	2,790	------	1,820	2,230	1,260	1,110	750	710	1,010
30	977	2,070	4,130	2,420	------	1,720	2,140	1,310	1,070	768	720	1,010
31	1,140	------	3,480	1,920	------	1,950	------	1,360	------	776	746	------
TOTAL	31,318	64,660	156,561	126,050	52,090	68,500	67,910	55,690	36,662	27,111	23,832	29,443
MEAN	1,010	2,155	5,050	4,066	1,860	2,210	2,264	1,796	1,222	875	769	981
MAX	1,350	8,110	23,200	15,700	2,510	3,230	2,850	2,250	2,260	1,090	954	2,230
MIN	820	1,150	812	1,260	1,480	1,720	1,790	1,260	868	735	700	738
AC-FT	62,120	128,300	310,500	250,000	103,300	135,900	134,700	110,500	72,720	53,770	47,270	58,400

CAL YR 1972 TOTAL 1,410,419 MEAN 3,855 MAX 43,700 MIN 804 AC-FT 2,799,000
WTR YR 1973 TOTAL 739,827 MEAN 2,027 MAX 23,200 MIN 700 AC-FT 1,467,000

PEAK DISCHARGE (BASE, 15,000 CFS).--Dec. 21 (0800) 28,800 cfs (10.37 ft); Jan. 13 (1800) 19,500 cfs (8.45 ft).

14211000 CLACKAMAS RIVER NEAR CLACKAMAS, OREG.

LOCATION.--Lat 45°23'36", long 122°31'54", in NE¼SW¼ sec.14, T.2 S., R.2 E., Clackamas County, on left bank 0.8 mi (1.3 km) upstream from Johnson Creek, 2.1 mi (3.4 km) southeast of Clackamas, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--930 mi^2 (2,409 km^2) at gage, 936 mi^2 (2,424 km^2) at Gladstone Bridge 3.6 mi (5.8 km) downstream, where high-flow discharge measurements are made.

PERIOD OF RECORD.--September 1911 to April 1912 (published as "at Park Place"), October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 50.68 ft (15.447 m) above mean sea level (levels by Corps of Engineers). Sept. 15, 1911, to Apr. 22, 1912, nonrecording gage at site 3.6 mi (5.8 km) downstream at different datum. Oct. 1, 1962, to Sept. 10, 1969, water-stage recorder at site 300 ft (91 m) downstream at present datum.

AVERAGE DISCHARGE.--11 years, 3,679 ft^3/s (104 m^3/s), 53.72 in/yr (1,364 mm/yr), 2,665,000 acre-ft/yr (3.29 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 38,000 ft^3/s (1,076 m^3/s) Dec. 21, gage height, 14.01 ft (4.270 m); minimum, 662 ft^3/s (18.7 m^3/s) July 11.

Period of record: Maximum discharge, 120,000 ft^3/s (3,400 m^3/s) Dec. 22, 1964, gage height, 27.0 ft (8.23 m), from floodmarks; minimum, 336 ft^3/s (9.52 m^3/s) Sept. 1, 11, 1969.

REMARKS.--Records good. Diurnal fluctuations and some regulation by powerplants and several storage dams upstream, operated by Portland General Electric Co. Small diversions above station for Estacada municipal water supply. Records of water temperatures for the current year are published in Part 2 of this report. All records given herein are for gage site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	1,200	2,160	5,110	2,430	4,250	2,870	2,640	1,490	1,340	892	868
2	1,130	1,680	2,510	5,170	2,720	3,900	2,810	2,560	1,320	1,320	868	868
3	1,180	2,300	3,030	4,520	2,580	3,950	2,750	2,490	1,340	1,300	880	855
4	1,230	2,540	2,760	4,500	2,550	3,440	2,680	2,670	1,370	1,250	898	855
5	1,070	3,150	2,760	4,420	2,490	3,290	2,670	2,460	1,380	1,260	868	819
6	1,050	2,690	2,240	4,230	2,430	2,970	2,740	2,350	1,230	1,210	868	825
7	1,070	2,270	1,470	2,330	2,420	2,650	2,700	2,380	1,210	1,190	849	916
8	1,100	1,700	1,490	3,400	2,450	2,680	2,510	2,400	1,210	1,170	837	922
9	1,120	1,870	1,290	3,000	2,450	2,450	2,300	2,550	1,230	1,100	801	940
10	1,160	2,450	1,730	1,610	2,210	3,260	2,420	2,890	1,260	1,000	789	934
11	1,210	2,650	2,400	2,560	2,400	3,730	2,480	2,490	1,250	965	807	843
12	1,120	2,120	1,460	5,590	2,210	3,310	2,560	2,330	1,200	1,090	819	831
13	1,050	1,830	1,780	19,800	2,400	3,290	3,040	2,300	980	1,050	843	825
14	1,050	1,890	1,290	16,600	2,040	3,160	3,090	2,410	1,210	1,010	874	819
15	1,080	1,930	2,790	10,600	1,990	3,040	3,170	2,490	1,200	995	855	831
16	1,120	1,780	1,500	9,850	2,200	2,950	2,840	2,540	1,390	910	831	880
17	1,080	1,710	3,420	9,060	2,120	3,210	3,590	2,350	2,460	1,020	831	849
18	1,030	1,350	5,950	7,780	2,170	3,010	3,460	2,230	2,650	973	874	886
19	1,020	1,460	12,000	6,730	2,130	3,430	3,840	1,910	1,870	973	813	886
20	1,170	1,530	12,400	5,680	2,130	3,340	3,950	1,960	1,680	958	813	922
21	1,200	1,640	31,300	5,240	2,030	3,120	3,290	1,890	1,640	898	807	904
22	1,070	1,640	21,000	4,340	1,790	2,990	3,630	1,940	1,610	980	819	1,460
23	947	1,450	16,300	4,130	1,970	2,830	3,930	1,890	1,390	940	831	1,460
24	954	1,240	17,900	4,750	1,840	2,620	3,690	1,970	1,350	874	916	2,950
25	961	1,770	13,700	4,280	2,240	2,620	3,460	2,390	1,480	916	1,050	2,550
26	996	10,700	10,100	3,930	2,870	2,590	3,410	1,940	1,890	910	995	1,970
27	1,070	6,160	9,650	3,730	3,230	2,530	3,360	1,930	1,840	910	898	1,320
28	1,410	4,300	9,210	2,700	3,140	2,560	3,110	1,820	1,610	892	807	1,230
29	1,560	3,440	7,160	3,430	------	2,480	2,860	1,540	1,460	880	795	1,150
30	1,110	2,480	6,280	3,380	------	2,370	2,770	1,500	1,330	880	801	1,110
31	1,190	------	5,370	2,610	------	2,780	------	1,580	------	880	819	------
TOTAL	34,548	74,920	214,400	175,060	65,630	94,800	91,980	68,790	44,530	32,044	26,448	33,478
MEAN	1,114	2,497	6,916	5,647	2,344	3,058	3,066	2,219	1,484	1,034	853	1,116
MAX	1,560	10,700	31,300	19,800	3,230	4,250	3,950	2,890	2,650	1,340	1,050	2,950
MIN	947	1,200	1,290	1,610	1,790	2,370	2,300	1,500	980	874	789	819
CFSM	1.20	2.68	7.44	6.07	2.52	3.29	3.30	2.39	1.60	1.11	.92	1.20
IN.	1.38	3.00	8.58	7.00	2.63	3.79	3.68	2.75	1.78	1.28	1.06	1.34
AC-FT	68,530	148,600	425,300	347,200	130,200	188,000	182,400	136,400	88,330	63,560	52,460	66,400

CAL YR 1972 TOTAL 1,779,777 MEAN 4,863 MAX 55,200 MIN 947 CFSM 5.23 IN 71.19 AC-FT 3,530,000
WTR YR 1973 TOTAL 956,628 MEAN 2,621 MAX 31,300 MIN 789 CFSM 2.82 IN 38.27 AC-FT 1,897,000

PEAK DISCHARGE (BASE, 16,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-21	1030	14.01	38,000	1-13	1800	11.14	25,400
12-24	0130	10.00	20,800				

14211500 JOHNSON CREEK AT SYCAMORE, OREG.

LOCATION.--Lat 45°28'40", long 122°30'24", in lot 2, SW¼ sec.13, T.1 S., R.2 E., Multnomah County, on right bank 0.3 mi (0.5 km) southwest of Sycamore station, 2.5 mi (4.0 km) east of city limits of Portland, and at mile 10.2 (16.4 km).

DRAINAGE AREA.--28.2 mi² (73.0 km²).

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 228.47 ft (69.638 m) above mean sea level.

AVERAGE DISCHARGE.--33 years, 54.3 ft³/s (1.54 m³/s), 26.15 in/yr (664 mm/yr), 39,340 acre-ft/yr (48.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,380 ft³/s (39.1 m³/s) Dec. 21, gage height, 10.80 ft (3.292 m); minimum, 0.10 ft³/s (0.003 m³/s) Aug. 7-11.

Period of record: Maximum discharge, 2,620 ft³/s (74.2 m³/s) Dec. 22, 1964, gage height, 14.68 ft (4.474 m); minimum, 0.08 ft³/s (0.002 m³/s) Aug. 21, 1966.

REMARKS.--Records good except those below 5.0 ft³/s (0.142 m³/s), which are poor. Slight diurnal fluctuation at low flow caused by recreational ponds upstream. Small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1318: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.5	20	70	32	151	42	5.9	1.5	1.7	.14	.58
2	1.6	2.3	104	108	29	115	35	5.0	1.5	1.5	.16	.69
3	.80	15	67	95	27	95	29	5.7	1.5	1.4	.14	.64
4	1.0	15	41	69	24	77	27	5.7	1.5	1.1	.14	.53
5	1.2	11	29	56	21	63	23	4.3	1.3	.99	.12	.48
6	1.5	8.2	27	42	19	51	20	3.7	1.1	.99	.12	.58
7	1.3	7.9	23	41	17	40	17	3.5	1.1	.99	.10	5.9
8	1.2	11	19	53	15	32	14	3.7	.99	1.1	.10	1.4
9	1.4	19	16	46	14	30	12	4.1	.99	.92	.10	1.1
10	1.6	39	13	22	24	59	11	5.2	.92	.75	.10	1.1
11	.99	18	12	27	23	43	8.7	3.1	.86	.75	.10	8.4
12	.75	11	11	201	19	37	7.6	2.3	.92	.69	.12	2.3
13	.69	8.7	10	461	17	40	7.1	2.0	1.5	.64	.12	.86
14	.64	7.1	9.4	252	15	35	6.1	1.7	1.1	.48	.33	.75
15	.64	5.9	10	161	15	31	5.7	1.6	1.5	.43	.28	.69
16	.64	5.9	12	231	14	30	21	1.5	2.0	.43	.28	.58
17	.69	5.2	232	224	31	36	33	1.5	3.5	.43	.28	.64
18	.75	6.6	253	164	34	32	80	1.5	3.3	.38	.23	.75
19	.75	10	305	130	30	91	90	1.4	2.5	.38	.23	210
20	.75	7.4	245	106	25	77	62	1.4	1.5	.43	.19	6.1
21	1.1	5.9	1.000	90	22	63	45	1.5	1.4	.33	.23	6.4
22	1.5	5.5	484	69	21	49	36	1.3	1.1	.33	.23	4.1
23	.92	5.9	386	58	18	39	28	1.6	1.1	.38	.23	5.9
24	.80	6.1	434	80	17	32	22	10	1.1	.33	2.1	22
25	2.9	30	258	66	83	27	18	8.9	6.1	.28	3.5	13
26	3.3	187	351	50	95	24	16	4.3	5.9	.23	1.1	5.9
27	1.6	72	343	43	100	23	12	2.9	3.9	.23	.80	4.1
28	3.7	44	215	38	77	27	12	2.7	2.9	.28	.64	2.7
29	4.1	32	138	33	------	21	10	2.9	2.1	.38	.58	2.1
30	2.5	25	107	40	------	26	7.6	3.1	3.3	.28	.48	1.8
31	1.5	------	87	41	------	54	------	1.7	------	.19	.64	------
TOTAL	44.71	629.1	5.261.4	3.167	878	1.550	757.8	105.7	59.98	19.72	13.91	312.07
MEAN	1.44	21.0	170	102	31.4	50.0	25.3	3.41	2.00	.64	.45	10.4
MAX	4.1	187	1.000	461	100	151	90	10	6.1	1.7	3.5	210
MIN	.64	1.5	9.4	22	14	21	5.7	1.3	.86	.19	.10	.48
CFSM	.05	.74	6.03	3.62	1.11	1.77	.90	.12	.07	.02	.02	.37
IN.	.06	.83	6.94	4.18	1.16	2.04	1.00	.14	.08	.03	.02	.41
AC-FT	89	1.250	10.440	6.280	1.740	3.070	1.500	210	119	39	28	619

CAL YR 1972 TOTAL 24.091.47 MEAN 65.8 MAX 1.000 MIN .28 CFSM 2.33 IN 31.78 AC-FT 47.790
WTR YR 1973 TOTAL 12.799.39 MEAN 35.1 MAX 1.000 MIN .10 CFSM 1.24 IN 16.88 AC-FT 25.390

PEAK DISCHARGE (BASE, 500 CFS).--Dec. 21 (0830) 1,380 cfs (10.80 ft).

14211720 WILLAMETTE RIVER AT PORTLAND, OREG.

LOCATION.--Lat 45°31'07", long 122°40'00", in NW¼NE¼ sec.3, T.1 S., R.1 E., Multnomah County, in pier at east end of drawspan on upstream side of Morrison Bridge in Portland and at mile 12.8 (20.6 km).

DRAINAGE AREA.--11,100 mi^2 (28,700 km^2), approximately.

PERIOD OF RECORD.--October 1972 to current year. Gage-height records collected in this vicinity since 1879 are in reports of the U.S. Weather Bureau.

GAGE.--Acoustic velocity meter (AVM) with water-stage and velocity-index recorder. Datum of gage is 1.55 ft (0.472 m) above mean sea level (levels by U.S. Weather Bureau).

EXTREMES.--Current year: Maximum discharge, 142,000 ft^3/s (4,021 m^3/s) Dec. 24; maximum gage height, 12.63 ft (3.850 m) Dec. 22; minimum daily discharge, 4,520 ft^3/s (128 m^3/s) Aug. 3.

Floods of June 7, 1894, and June 1, 1948, reached stages of 33.0 ft (10.06 m) and 30.0 ft (9.14 m), respectively, from information by U.S. Weather Bureau.

REMARKS.--Records good. Flow regulated by many reservoirs upstream (see elsewhere in this report). Many diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16,400	16,800	21,800	72,000	26,900	22,900	21,800	13,000	7,410	7,520	6,080	7,980
2	15,500	18,300	20,100	60,500	24,500	29,000	22,800	12,700	8,350	6,920	5,020	6,990
3	14,000	21,700	21,200	56,900	25,200	30,800	23,600	12,600	8,110	7,970	4,520	6,360
4	12,700	23,500	21,700	51,400	24,000	30,100	24,500	15,200	6,940	6,990	5,450	8,090
5	11,500	27,400	22,500	47,100	21,800	26,300	23,000	14,800	7,790	6,700	5,750	7,540
6	11,000	28,500	19,300	42,400	21,000	25,300	20,200	14,300	7,990	6,670	4,860	8,180
7	10,900	26,100	17,600	38,100	19,900	22,800	21,500	10,400	8,400	7,110	5,680	8,280
8	10,900	25,500	20,700	32,400	19,000	24,100	18,700	11,000	8,300	7,910	6,550	8,410
9	10,800	25,800	21,600	30,300	18,200	21,100	17,300	11,300	8,300	7,120	5,730	8,680
10	11,100	25,100	22,200	28,900	18,000	21,900	17,000	13,100	8,400	6,300	5,860	6,290
11	11,700	27,900	21,600	31,000	18,500	25,600	16,600	12,500	8,400	6,670	6,700	6,360
12	12,100	28,000	18,600	35,800	17,700	26,700	15,400	12,800	8,600	6,590	5,600	6,430
13	12,300	25,400	18,000	80,000	17,800	27,400	14,900	11,600	6,450	6,390	4,950	6,910
14	12,300	24,900	15,900	110,000	16,000	25,900	14,900	9,700	7,360	7,440	5,280	6,800
15	12,300	23,200	15,000	109,000	14,900	23,700	14,300	10,100	6,600	7,280	4,650	7,650
16	12,300	24,000	12,400	97,200	15,600	21,600	12,800	9,700	6,390	4,920	5,230	6,370
17	12,000	21,700	13,400	94,300	15,800	22,700	13,600	9,940	8,440	5,150	4,770	6,700
18	12,000	20,500	30,000	95,700	16,700	23,300	15,600	10,000	9,460	5,470	6,440	6,720
19	12,000	20,600	56,800	91,400	15,000	24,000	21,400	9,340	10,800	6,360	6,240	6,640
20	12,100	20,800	75,500	83,900	15,600	29,900	23,900	8,670	10,500	5,870	6,280	7,810
21	12,600	20,900	113,000	72,200	15,100	32,500	24,500	8,380	8,940	6,130	6,290	9,520
22	13,800	20,000	128,000	60,200	14,300	30,200	23,200	8,380	8,540	6,150	6,670	10,800
23	14,400	20,000	133,000	53,000	14,100	27,500	21,900	7,260	7,360	6,420	7,240	10,700
24	14,500	19,000	135,000	48,000	13,900	25,800	21,700	11,100	7,730	6,800	7,100	11,500
25	14,600	18,000	127,000	47,700	15,700	24,200	23,500	13,200	7,940	7,660	7,800	12,700
26	17,700	28,600	118,000	46,800	18,200	21,900	22,000	12,900	9,920	6,410	7,700	14,900
27	16,700	32,100	108,000	43,700	22,800	20,500	20,900	12,400	10,300	6,100	7,000	12,900
28	16,800	31,200	108,000	38,100	23,900	21,000	17,000	11,600	10,000	6,440	7,000	10,400
29	18,400	27,400	107,000	30,700	------	20,000	15,900	10,600	8,580	5,580	7,030	9,700
30	16,200	25,300	102,000	29,400	------	20,500	14,200	9,020	8,220	6,600	7,810	9,080
31	18,200	------	89,800	27,800	------	21,700	------	8,020	------	5,140	6,930	------
TOTAL	419,800	718,200	1,754.7M	1,785.9M	520,100	770,900	578,600	345,610	250,520	202,780	190,210	257,390
MEAN	13,540	23,940	56,600	57,610	18,580	24,870	19,290	11,150	8,351	6,541	6,136	8,580
MAX	18,400	32,100	135,000	110,000	26,900	32,500	24,500	15,200	10,800	7,970	7,810	14,900
MIN	10,800	16,800	12,400	27,800	13,900	20,000	12,800	7,260	6,390	4,920	4,520	6,290
AC-FT	832,700	1,425M	3,480M	3,542M	1,032M	1,529M	1,148M	685,500	496,900	402,200	377,300	510,500

WTR YR 1973 TOTAL 7,794,710 MEAN 21,360 MAX 135,000 MIN 4,520 AC-FT 15,460,000

14222880 COLUMBIA RIVER AT COLUMBIA CITY, OREG.

LOCATION.--Lat 45°53'41", long 122°48'23", in NE¼NE¼ sec.28, T.5 N., R.1 W., Columbia County, on left bank in Columbia City, at the pumping station at the corner of "E" Street and "The Strand", and at mile 84.0 (135.2 km).

DRAINAGE AREA.--254,000 mi² (657,900 km²), approximately.

PERIOD OF RECORD.--October 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at Columbia River datum, 0.79 ft (0.241 m) above mean sea level.

EXTREMES.--Current year: Maximum gage height, 10.53 ft (3.210 m) Dec. 22; minimum, -0.10 ft (-0.030 m) Sept. 9.
Period of record: Maximum recorded gage height, 17.48 ft (5.328 m) June 12, 13, 1972; minimum, -0.10 ft (-0.030 m) Sept. 9, 1973.

REMARKS.--Flow regulated by many reservoirs upstream. Records of water temperatures for the current year are published in Part 2 of this report.

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.34	1.15	2.62	4.79	2.08	3.48	5.10	2.00	3.32	4.82	2.81	3.83
2	4.30	1.12	2.62	5.48	2.82	4.06	5.74	3.00	4.11	5.42	2.86	4.13
3	3.99	0.76	2.51	5.71	2.64	4.05	5.93	2.00	4.35	5.68	3.61	4.52
4	4.35	1.48	2.96	5.60	2.48	3.99	5.73	3.00	4.30	5.81	3.63	4.61
5	4.41	1.14	2.90	5.37	2.36	3.76	5.78	3.77	4.94	5.89	3.99	4.85
6	4.47	1.21	2.85	5.63	2.27	3.85	6.77	4.08	5.50	5.29	3.26	4.31
7	4.63	1.46	3.06	6.12	2.52	4.35	6.55	4.40	5.47	4.37	2.52	3.42
8	5.02	1.51	3.21	5.52	2.96	4.14	5.75	4.02	4.85	4.26	1.78	3.07
9	5.03	1.73	3.33	5.69	2.63	4.16	5.12	3.45	4.30	5.40	2.95	4.17
10	5.06	1.89	3.30	5.62	2.99	4.31	4.78	2.86	3.76	5.69	3.60	4.52
11	4.73	1.97	3.17	5.21	3.11	4.09	4.47	2.40	3.48	5.85	3.44	4.54
12	4.76	1.85	3.10	4.09	2.27	3.24	5.02	3.00	3.85	6.73	4.03	5.17
13	4.65	1.91	3.14	4.16	1.59	3.00	4.06	1.99	2.91	7.34	4.57	5.83
14	4.03	1.72	2.70	4.57	2.15	3.53	4.40	2.17	3.03	8.18	6.13	6.91
15	3.52	0.96	2.30	5.02	2.66	3.89	4.29	1.92	2.87	8.64	6.54	7.47
16	3.74	0.51	2.21	5.45	2.80	3.93	5.26	1.97	3.35	9.41	7.24	8.07
17	3.92	1.15	2.62	5.39	2.27	3.78	5.84	2.23	3.63	9.37	7.24	8.09
18	3.94	1.19	2.78	5.96	2.41	4.07	6.51	2.92	4.40	9.92	7.08	8.34
19	4.72	1.69	3.21	5.81	2.21	3.89	7.83	3.82	5.93	9.46	7.69	8.46
20	5.21	2.19	3.60	6.00	2.21	3.94	8.02	5.46	6.71	8.98	6.89	7.84
21	5.20	1.80	3.53	6.85	2.49	4.66	10.26	6.14	8.34	7.84	5.85	6.86
22	5.15	1.69	3.35	7.03	3.92	5.16	10.53	9.03	9.75	7.04	5.19	6.05
23	5.66	1.37	3.56	6.25	3.15	4.49	9.90	8.90	9.42	7.15	4.88	5.98
24	5.74	2.22	3.72	5.35	2.25	3.64	9.78	8.63	9.19	6.85	4.45	5.62
25	6.06	2.20	3.91	5.33	1.85	3.51	9.01	7.82	8.39	6.59	4.41	5.23
26	5.75	2.53	3.97	5.15	2.39	4.02	7.89	6.43	7.19	5.57	3.46	4.31
27	5.85	2.40	3.92	4.82	2.55	3.77	7.73	6.13	6.86	5.11	3.22	4.03
28	4.77	2.70	3.80	4.90	2.49	3.57	7.41	6.10	6.62	5.11	2.81	3.91
29	3.72	1.68	2.73	4.63	1.89	3.11	6.65	5.21	5.90	5.59	3.53	4.27
30	4.05	0.94	2.71	4.89	1.96	3.20	6.49	4.79	5.62	6.08	3.89	4.90
31	4.19	2.07	3.15	---	---	---	5.50	3.40	4.69	5.97	3.22	4.75
MONTH	6.06	0.51	3.11	7.03	1.59	3.88	10.53	1.92	5.38	9.92	1.78	5.42

14222880 COLUMBIA RIVER AT COLUMBIA CITY, OREG.--Continued

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.85	3.20	4.36	5.94	3.23	4.33	4.27	1.63	2.97	4.94	1.96	3.39
2	6.47	3.18	4.87	5.72	3.18	4.51	4.49	2.10	3.28	5.56	2.38	3.77
3	6.62	3.80	5.19	6.19	3.43	4.70	5.68	3.30	4.49	5.80	2.54	4.05
4	5.89	2.90	4.47	6.03	3.25	4.69	6.42	3.64	4.80	6.34	2.91	4.48
5	5.49	2.49	3.95	6.28	3.19	4.77	6.17	3.12	4.29	6.53	2.57	4.36
6	5.43	2.69	4.05	6.78	4.09	5.49	6.13	2.89	4.18	5.68	1.93	3.63
7	5.40	2.54	4.09	6.85	4.21	5.41	5.29	1.52	3.25	5.16	2.12	3.55
8	5.88	3.21	4.52	6.97	4.29	5.35	4.46	1.19	2.69	5.66	2.56	4.01
9	6.06	3.40	4.50	6.88	3.94	5.11	4.43	1.50	2.84	4.79	2.09	3.54
10	6.30	3.37	4.45	7.35	3.91	5.18	4.51	2.30	3.26	4.80	2.29	3.59
11	6.21	2.97	4.29	6.17	2.83	4.30	4.45	1.98	3.33	4.81	1.92	3.24
12	5.62	2.57	3.91	5.36	3.02	4.07	4.22	1.97	3.16	4.75	1.57	2.94
13	5.53	2.20	3.73	5.69	3.12	4.43	4.67	2.33	3.49	4.65	1.68	2.92
14	5.80	2.65	3.94	4.99	2.41	3.67	4.90	1.71	3.31	4.78	2.14	3.40
15	6.17	3.00	4.44	5.21	2.56	3.77	4.58	1.66	3.07	5.34	2.32	3.60
16	6.38	3.32	4.78	6.02	3.16	4.47	4.90	2.00	3.62	5.15	1.96	3.45
17	6.32	3.41	4.79	6.08	2.75	4.56	6.03	3.02	4.57	5.35	2.38	3.74
18	5.53	2.32	3.92	5.65	2.79	4.21	6.29	3.60	4.98	5.48	2.46	3.88
19	5.39	1.94	3.67	6.26	2.97	4.89	6.60	3.99	5.07	5.62	2.69	3.99
20	5.54	2.78	3.98	6.85	3.90	5.24	5.61	2.71	4.09	5.14	2.36	3.61
21	5.03	2.47	3.61	6.57	3.92	5.11	4.88	2.04	3.22	4.60	2.00	3.37
22	5.46	2.77	3.92	6.19	3.45	4.61	4.23	1.11	2.55	4.33	1.48	2.97
23	5.21	2.61	3.66	5.47	2.84	4.07	3.85	1.17	2.42	4.28	2.03	3.17
24	5.22	2.56	3.65	5.24	2.36	3.64	3.51	1.20	2.34	4.47	2.04	3.43
25	4.91	2.03	3.31	4.50	1.86	3.03	3.02	0.97	2.17	4.64	2.08	3.20
26	4.87	2.54	3.46	3.79	1.72	2.68	3.32	0.79	2.24	4.57	1.58	3.03
27	5.05	2.39	3.70	4.06	2.47	3.20	3.38	1.07	2.38	4.44	1.40	2.68
28	4.98	2.22	3.62	3.94	2.44	3.34	3.66	1.26	2.38	4.47	1.60	2.75
29	---	---	---	4.07	2.84	3.54	4.00	1.22	2.60	4.73	1.79	3.11
30	---	---	---	5.02	2.93	4.23	4.15	1.20	2.64	5.51	2.30	3.73
31	---	---	---	4.86	1.73	3.60	---	---	---	5.81	2.30	3.87
MONTH	6.62	1.94	4.10	7.35	1.72	4.32	6.60	0.79	3.32	6.53	1.40	3.49

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.03	2.56	3.52	5.37	1.61	3.38	5.39	---	---	4.30	1.35	2.90
2	6.29	2.35	4.05	5.30	1.87	3.66	5.45	2.45	3.98	3.90	0.70	2.20
3	5.73	2.04	3.75	5.46	2.22	3.76	5.45	2.45	3.91	3.70	0.70	2.00
4	5.50	2.43	3.93	4.61	1.26	3.03	4.82	2.07	3.61	3.55	0.75	2.00
5	5.57	2.70	4.15	4.52	1.17	2.80	3.90	0.66	2.33	3.90	0.65	2.20
6	4.85	1.76	3.48	4.70	1.61	3.01	4.35	0.97	2.30	3.60	0.70	2.20
7	4.85	1.80	3.24	4.39	1.05	2.63	4.50	1.62	2.69	3.60	0.50	2.00
8	5.27	2.16	3.41	4.00	0.76	2.19	4.55	1.74	2.84	3.40	0.15	1.80
9	5.00	2.01	3.46	4.47	0.96	2.20	4.55	1.88	3.09	3.10	-0.10	1.40
10	4.55	0.92	2.36	4.53	1.78	2.89	4.74	1.43	2.84	3.50	0.50	2.20
11	4.32	1.26	2.62	4.62	1.76	2.87	4.62	1.24	2.71	4.30	1.20	2.80
12	4.96	1.85	3.22	4.55	1.60	2.94	4.29	0.97	2.64	4.30	1.30	2.90
13	5.27	2.08	3.51	4.99	2.19	3.48	4.45	1.15	2.80	4.80	1.45	3.10
14	5.34	2.09	3.63	5.24	1.86	3.31	4.60	1.25	2.90	4.85	1.50	3.10
15	5.41	2.11	3.62	4.69	0.99	2.83	4.20	1.15	2.60	4.60	1.45	3.05
16	5.41	2.12	3.72	4.68	1.30	3.18	4.50	1.30	2.90	4.60	1.00	2.90
17	5.18	1.68	3.36	5.29	2.22	3.84	5.05	1.90	3.10	4.75	1.35	2.80
18	4.67	1.58	3.15	5.52	2.63	4.16	4.60	1.15	3.20	4.60	1.40	2.80
19	4.86	1.95	3.40	5.23	2.59	4.04	4.35	0.80	2.40	4.90	1.30	3.00
20	4.47	1.52	3.13	5.00	2.32	3.71	4.65	1.25	2.40	5.00	1.80	3.40
21	4.62	1.93	3.34	4.17	1.04	2.77	4.40	1.30	2.60	4.65	1.75	3.30
22	4.54	1.79	3.28	4.06	0.56	2.19	4.65	1.00	2.50	4.65	1.40	3.10
23	4.28	1.15	2.77	4.45	1.00	2.25	4.70	1.55	2.80	4.70	1.50	3.20
24	4.62	0.95	2.44	4.63	1.22	2.39	4.70	1.60	2.80	4.85	1.70	3.50
25	5.54	1.87	3.03	4.63	1.35	2.55	5.20	1.60	3.00	5.10	1.90	3.60
26	5.54	2.46	3.56	4.81	1.24	2.74	4.95	1.10	2.90	5.00	1.90	3.50
27	5.69	2.44	3.67	5.25	1.92	3.36	4.65	1.00	2.80	5.10	1.90	3.50
28	5.72	2.34	3.72	5.64	1.86	3.45	4.70	1.30	3.00	---	---	---
29	5.88	2.33	3.83	5.50	1.84	3.53	5.20	1.95	3.50	---	---	---
30	5.99	2.09	3.79	5.08	1.53	---	5.40	2.35	3.70	---	---	---
31	---	---	---	---	---	---	5.40	2.35	3.70	---	---	---
MONTH	6.29	0.92	3.40	5.64	0.56	3.07	5.45	0.66	2.95	5.10	-0.10	2.75
YEAR	10.53	-0.10	3.78									

14245295 COLUMBIA RIVER AT RAINIER, OREG.

LOCATION.--Lat 46°06'02", long 122°57'47", in SE¼SW¼ sec.8, T.7 N., R.2 W., Columbia County, on left bank at Rainier, 1.2 mi (1.9 km) downstream from Nice Creek, 500 ft (152 m) upstream from Interstate bridge, and at mile 66.1 (106.4 km).

DRAINAGE AREA.--256,700 mi² (664,900 km²), approximately.

PERIOD OF RECORD.--November 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at Columbia River datum, 0.34 ft (0.104 m) below mean sea level.

EXTREMES.--Current year: Maximum recorded gage height, 11.60 ft (3.536 m) Dec. 21; minimum, 0.78 ft (0.238 m) Sept. 9.
Period of record: Maximum recorded gage height, 14.95 ft (4.557 m) June 12, 1972; minimum, 0.78 ft (0.238 m) Sept. 9, 1973.

REMARKS.--Flow regulated by many reservoirs upstream. Records of water temperatures for the current year are published in Part 2 of this report.

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.62	1.32	3.42	6.05	2.13	3.82	---	---	---	---	---	---
2	5.48	1.29	3.34	6.60	2.68	4.41	---	---	---	---	---	---
3	5.28	0.96	3.10	7.00	2.70	4.70	---	---	---	---	---	---
4	5.38	1.26	3.13	6.95	2.50	4.65	---	---	---	---	---	---
5	5.53	1.59	3.37	6.65	2.25	4.30	---	---	---	---	---	---
6	5.49	1.22	3.30	6.90	2.30	4.60	---	---	---	---	---	---
7	5.85	1.62	3.65	7.45	2.50	4.90	---	---	---	---	---	---
8	6.46	1.60	3.90	6.75	2.70	4.65	---	---	---	---	---	---
9	6.33	1.90	3.95	7.00	2.40	4.60	---	---	---	---	---	---
10	6.40	1.90	3.80	6.80	2.80	4.75	---	---	---	---	---	---
11	5.95	2.10	3.70	6.30	2.85	4.55	---	---	---	---	---	---
12	5.95	1.75	3.50	5.40	2.25	3.75	---	---	---	---	---	---
13	5.90	1.85	3.60	5.20	1.65	3.40	---	---	---	---	---	---
14	5.19	1.80	3.45	5.60	2.15	3.80	---	---	---	---	---	---
15	4.70	1.25	3.10	6.00	2.50	4.10	---	---	---	---	---	---
16	4.73	0.88	2.96	6.50	2.65	4.40	---	---	---	---	---	---
17	4.80	1.40	3.27	---	---	---	---	---	---	---	---	---
18	5.11	1.44	3.37	---	---	---	---	---	---	---	---	---
19	5.83	1.68	3.55	---	---	---	---	---	---	---	---	---
20	6.53	2.18	3.94	---	---	---	---	---	---	9.74	6.16	7.60
21	6.68	2.18	4.02	---	---	---	11.60	6.20	9.00	8.35	4.90	6.65
22	6.70	2.15	4.10	---	---	---	10.42	8.60	10.00	7.55	4.41	5.84
23	6.38	1.50	3.90	---	---	---	10.75	8.80	9.70	7.61	4.02	5.85
24	---	---	---	---	---	---	10.50	8.20	9.30	7.94	4.19	5.86
25	---	---	---	---	---	---	9.78	7.80	8.20	7.45	4.08	5.28
26	---	---	---	---	---	---	9.20	6.75	7.90	6.44	3.18	4.42
27	---	---	---	---	---	---	---	---	---	5.86	2.93	4.13
28	5.95	2.60	4.27	5.99	2.57	3.87	---	---	---	6.08	2.59	4.19
29	4.82	1.72	3.24	5.77	1.98	3.47	---	---	---	6.65	3.19	4.60
30	4.83	0.97	3.04	6.08	2.10	3.60	---	---	---	7.23	3.41	5.19
31	5.29	1.89	3.40	---	---	---	---	---	---	7.09	2.97	5.04
MONTH	6.70	0.88	3.53	---	---	---	---	---	---	---	---	---

14245295 COLUMBIA RIVER AT RAINIER, OREG.--Continued

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.98	2.88	4.72	7.23	3.17	4.87	5.56	---	---	6.13	---	---
2	7.60	3.40	5.21	6.91	2.94	4.86	5.72	---	---	6.77	2.15	4.06
3	7.77	3.26	5.46	7.47	3.29	5.12	6.60	2.71	---	7.10	2.33	4.36
4	7.18	3.19	5.00	7.40	2.05	5.16	7.24	3.12	---	7.51	2.63	4.78
5	6.65	2.50	4.40	7.39	3.15	5.08	7.39	2.72	---	7.71	2.51	4.68
6	6.58	2.60	4.60	7.90	3.67	5.73	7.32	---	---	6.96	1.88	4.08
7	6.55	2.50	4.60	8.03	3.83	5.64	6.60	---	---	6.43	1.77	3.96
8	6.95	2.95	4.80	8.05	3.78	5.51	5.72	---	---	6.85	2.40	4.42
9	7.20	3.22	5.00	8.04	3.59	5.38	5.74	---	---	5.73	1.97	3.90
10	7.55	3.30	5.00	8.54	3.78	5.56	5.59	---	---	5.73	2.03	3.85
11	7.40	3.10	4.80	7.45	2.74	4.73	5.40	---	---	5.84	1.87	3.53
12	6.85	2.50	4.60	6.61	3.03	4.43	5.44	---	---	5.73	1.65	3.35
13	6.70	2.45	4.60	6.64	---	---	5.71	---	---	5.80	1.92	3.37
14	7.10	2.50	4.80	6.09	---	---	5.96	---	---	6.09	1.99	3.79
15	7.30	3.15	5.00	6.40	---	---	5.94	---	---	6.54	2.11	3.95
16	7.65	3.15	5.20	7.12	3.11	4.78	6.29	---	---	6.39	1.77	3.82
17	7.55	2.98	5.40	6.96	2.73	4.88	7.25	2.02	---	6.41	2.03	4.04
18	6.70	2.25	4.60	6.96	2.84	4.76	7.39	3.25	---	6.51	2.16	4.13
19	6.50	2.25	4.30	7.42	3.31	5.30	7.44	3.40	---	6.63	2.01	4.24
20	6.70	2.60	4.40	8.02	3.63	5.54	6.60	---	---	6.23	2.01	3.90
21	6.20	2.50	4.20	7.81	3.51	5.36	5.94	---	---	5.67	1.80	3.69
22	6.65	2.70	4.40	7.31	3.10	4.84	5.45	---	---	5.45	1.43	3.43
23	6.40	2.50	4.40	6.56	2.00	4.30	4.97	---	---	5.38	1.94	3.69
24	6.35	2.80	4.35	6.33	---	---	4.56	---	---	5.53	2.12	3.96
25	6.05	2.30	4.35	5.71	---	---	4.04	---	---	5.59	1.93	3.66
26	6.00	2.65	4.35	4.89	---	---	4.33	---	---	5.52	1.73	3.43
27	6.11	2.39	---	4.88	---	---	4.69	---	---	5.53	1.51	3.10
28	6.29	2.39	---	4.57	---	---	4.97	---	---	5.82	1.80	3.05
29	---	---	---	5.23	---	---	4.96	---	---	6.22	1.42	3.41
30	---	---	---	5.78	---	---	5.42	---	---	6.58	2.00	3.88
31	---	---	---	5.83	---	---	---	---	---	6.98	2.03	4.08
MONTH	7.77	2.25	4.71	8.54	---	---	7.44	---	---	7.71	1.42	3.85

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.25	2.19	4.31	6.80	1.49	3.85	6.50	2.10	4.20	5.94	1.81	3.74
2	7.46	2.03	4.37	6.65	1.86	4.10	6.50	2.20	4.30	5.42	1.40	3.11
3	6.99	1.82	4.13	6.70	2.03	4.16	6.40	2.20	4.30	5.04	1.41	2.90
4	6.71	2.00	4.18	5.99	1.31	3.57	6.00	2.20	4.10	4.84	1.20	2.76
5	6.62	2.01	4.33	5.69	1.20	3.35	5.00	1.25	3.00	5.29	1.31	3.21
6	5.95	1.63	3.86	5.83	1.58	3.50	5.35	1.40	3.20	4.93	1.38	3.03
7	5.94	1.64	3.65	5.47	1.33	3.20	5.50	1.75	3.30	4.93	1.19	2.92
8	6.16	1.93	3.70	5.09	1.25	2.86	5.60	1.80	3.60	4.82	0.79	2.62
9	5.71	2.05	3.65	5.49	1.20	2.79	5.90	1.85	3.60	4.74	0.78	2.44
10	5.14	1.23	2.84	5.65	1.68	3.24	5.90	1.60	3.70	4.92	0.87	3.00
11	5.90	1.22	3.04	5.54	1.51	3.17	5.75	1.40	3.50	5.86	1.69	3.61
12	6.11	1.81	3.66	5.55	1.35	3.18	5.60	1.05	3.40	6.00	1.68	3.80
13	6.44	1.95	3.90	5.88	1.82	3.63	5.82	1.15	3.56	6.42	1.85	4.04
14	6.51	1.94	4.01	6.27	1.70	3.68	5.84	1.26	3.33	6.52	1.94	4.14
15	6.60	1.91	4.01	5.97	1.20	3.37	5.51	1.05	3.28	6.40	2.03	3.97
16	6.69	1.99	4.23	6.01	1.33	3.68	5.71	1.37	3.47	6.32	1.75	3.70
17	6.55	1.71	3.90	6.49	2.04	4.21	6.08	1.37	3.66	6.39	1.64	3.77
18	5.89	1.43	3.60	6.60	2.39	4.45	5.77	1.50	3.51	6.16	1.93	3.73
19	5.98	1.72	3.79	6.30	2.33	4.35	5.36	1.05	3.02	6.38	1.74	3.79
20	5.56	1.40	3.52	6.15	2.16	4.09	5.70	1.32	3.04	6.42	2.21	4.21
21	5.51	1.71	3.65	5.45	1.31	3.36	5.52	1.45	3.06	6.18	2.05	3.98
22	5.59	1.89	3.64	5.20	1.00	3.00	5.64	1.11	2.93	6.45	1.84	3.82
23	5.44	1.33	3.25	5.60	1.30	3.10	5.89	1.47	3.25	6.43	1.97	3.94
24	5.67	1.41	3.15	5.65	1.45	3.00	6.41	1.50	3.42	6.52	2.08	4.22
25	6.47	2.01	3.59	5.85	1.40	3.25	6.40	1.60	3.61	6.74	2.21	4.27
26	6.70	2.38	4.30	6.30	1.20	3.20	6.29	1.27	3.44	6.61	2.16	4.20
27	6.70	2.20	4.20	6.35	1.65	3.70	6.20	1.12	3.52	6.67	2.14	4.20
28	6.82	2.10	4.10	6.80	1.85	4.10	6.34	1.37	3.72	6.58	1.98	4.07
29	7.05	2.10	4.20	6.70	1.80	4.20	6.52	2.04	4.16	6.30	2.08	3.91
30	7.27	2.09	4.16	6.50	1.40	3.80	6.72	2.34	4.36	5.83	1.78	3.51
31	---	---	---	6.70	2.00	4.40	6.86	2.37	4.34	---	---	---
MONTH	7.46	1.22	3.83	6.80	1.00	3.59	6.86	1.05	3.57	6.74	0.78	3.62
YEAR	11.60	0.78	4.12									

14247295 COLUMBIA RIVER AT WAUNA, OREG.

LOCATION.--Lat 46°09'40", long 123°24'30", in SE¼ sec.22, T.8 N., R.6 W., Clatsop County, on left bank at northwest end of Crown-Zellerbach wood-pulp processing plant at Wauna, and at mile 41.5 (66.8 km).

DRAINAGE AREA.--257,000 mi² (665,600 km²), approximately.

PERIOD OF RECORD.--November 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at Columbia River datum, 1.76 ft (0.536 m) below mean sea level.

EXTREMES.--Current year: Maximum gage height, 11.96 ft (3.645 m), Dec. 21; minimum, -0.19 ft (-0.058 m), Sept. 28.
Period of record: Maximum gage height, 11.96 ft (3.645 m) Dec. 21, 1972; minimum, -0.19 ft (-0.058 m), Sept. 28, 1973.

REMARKS.--Flow regulated by many reservoirs upstream. Records of water temperatures for the current year are published in Part 2 of this report.

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.74	0.39	3.67	---	---	---	7.73	1.32	4.16	7.60	1.28	4.38
2	6.55	0.34	3.45	---	---	---	8.12	1.21	4.50	8.14	1.27	4.67
3	6.30	0.09	3.20	8.27	1.34	4.60	8.28	0.91	4.62	8.16	1.09	4.73
4	6.43	0.09	3.23	8.31	1.00	4.70	8.00	0.94	4.48	8.29	3.19	6.25
5	6.74	0.29	3.59	8.09	0.53	4.42	7.35	0.84	4.44	8.29	1.18	5.17
6	6.97	0.12	3.44	8.39	0.79	4.69	8.71	1.38	5.12	7.89	0.94	4.59
7	7.42	0.38	3.81	8.73	0.83	5.13	8.27	1.24	4.92	7.24	0.45	4.22
8	8.02	0.63	4.18	7.82	0.71	4.56	7.70	1.66	5.29	6.53	0.57	3.82
9	7.69	0.58	4.24	8.16	1.22	4.86	7.14	0.53	4.53	6.89	---	---
10	7.64	0.63	4.19	7.95	1.24	4.97	6.80	0.51	3.96	---	---	---
11	7.18	0.46	3.97	7.35	1.20	4.63	6.28	0.59	3.97	7.95	2.22	5.39
12	7.08	0.39	3.83	6.52	0.97	4.16	7.03	1.08	4.21	8.75	2.35	5.13
13	6.90	0.57	3.99	6.26	0.66	4.07	6.66	0.91	3.70	9.34	2.44	5.40
14	6.37	0.81	3.82	6.66	1.18	4.21	7.11	1.28	3.85	9.40	2.51	5.66
15	5.97	0.72	3.64	7.09	1.41	4.26	7.46	1.15	3.96	10.12	2.83	6.16
16	5.97	0.53	3.52	7.57	1.64	4.26	8.89	1.58	4.90	10.99	2.81	6.72
17	6.04	0.66	3.56	7.91	1.18	4.18	9.47	1.37	5.09	10.76	2.55	6.49
18	6.36	0.56	3.48	8.78	0.88	4.56	9.99	1.91	5.56	11.57	3.28	7.06
19	7.03	0.66	3.63	8.95	0.48	4.54	10.74	2.10	6.24	10.42	2.50	6.63
20	---	---	---	9.04	0.34	4.50	10.68	2.52	6.39	10.51	2.63	6.42
21	---	---	---	9.36	0.75	4.85	11.96	3.91	7.51	8.92	1.88	5.78
22	---	---	---	9.45	0.77	5.11	11.24	3.85	7.75	8.23	1.82	5.12
23	---	---	---	9.16	0.47	5.01	10.57	3.85	7.39	8.25	1.73	5.13
24	---	---	---	8.09	0.37	4.38	9.92	3.80	7.21	8.81	2.37	5.47
25	---	---	---	7.89	0.11	4.31	9.14	4.21	6.75	8.16	2.39	4.67
26	---	---	---	7.20	0.63	4.39	9.13	3.73	6.15	7.25	1.55	3.97
27	---	---	---	6.85	0.74	3.92	9.20	3.73	6.02	6.45	1.30	3.67
28	---	---	---	6.94	1.06	3.73	8.38	3.21	5.34	6.93	1.33	4.07
29	---	---	---	6.89	1.08	3.51	7.77	2.34	4.83	7.64	1.50	4.56
30	---	---	---	7.12	0.88	3.50	8.11	---	---	8.23	---	---
31	---	---	---	---	---	---	7.61	1.33	---	7.99	1.08	---
MONTH	---	---	---	9.45	0.11	4.42	11.96	0.51	5.27	11.57	0.45	5.23

14247295 COLUMBIA RIVER AT WAUNA, OREG.--Continued

GAGE HEIGHT (FT.) , WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.93	0.95	4.51	8.35	1.51	4.92	6.53	0.32	3.25	7.29	0.08	3.54
2	8.48	1.31	---	7.83	1.08	4.57	6.50	0.19	3.26	7.92	0.16	3.88
3	8.72	1.29	5.09	8.31	1.35	4.83	7.16	0.40	3.73	8.34	0.28	4.23
4	8.19	---	4.85	8.31	1.22	4.84	7.77	0.74	4.05	8.87	0.56	4.56
5	7.74	0.84	---	8.13	1.57	4.75	8.11	0.55	4.10	8.81	0.64	4.53
6	7.58	0.95	4.43	8.53	1.87	5.12	8.18	0.38	4.02	8.45	0.36	4.34
7	7.59	0.95	4.30	8.72	1.66	5.04	7.68	-0.13	5.72	7.90	0.32	4.29
8	7.82	1.35	4.43	8.71	1.49	4.91	7.32	-0.10	4.79	8.14	0.98	4.69
9	8.14	---	---	8.79	1.40	4.95	7.32	0.33	3.92	7.00	0.89	4.25
10	8.61	---	---	9.35	1.84	5.22	6.99	0.64	3.95	6.95	1.02	4.04
11	8.61	1.75	4.96	8.33	1.06	4.56	6.93	1.28	4.27	7.26	1.21	3.89
12	---	---	---	7.52	1.13	4.25	7.43	1.28	4.34	7.40	1.31	3.85
13	---	---	---	7.31	0.82	4.11	7.51	0.76	4.17	7.75	0.84	3.90
14	8.34	0.73	---	6.88	0.44	3.77	6.85	0.73	3.63	7.76	1.04	4.31
15	8.51	0.92	4.66	7.21	0.49	3.86	7.05	0.48	3.65	8.03	0.96	4.32
16	8.67	1.04	---	7.96	1.08	4.38	7.48	0.85	4.18	7.93	0.69	4.28
17	8.54	0.94	4.71	7.81	1.12	4.50	8.19	1.08	4.49	7.91	0.71	4.32
18	7.79	0.59	---	7.93	1.45	4.72	8.17	1.26	4.73	7.72	0.68	4.25
19	7.49	0.85	4.06	8.47	1.65	5.06	7.97	1.05	4.34	7.85	0.81	4.34
20	7.66	0.97	4.09	8.76	1.64	5.01	7.28	0.47	3.78	7.57	0.79	4.29
21	7.09	0.75	---	8.54	1.42	4.81	6.79	0.06	3.44	7.07	0.30	4.01
22	7.59	1.37	4.25	8.00	1.07	4.29	6.47	-0.02	3.27	6.72	0.06	3.75
23	7.51	1.37	4.26	7.21	0.62	3.87	6.05	-0.05	3.11	6.38	0.70	3.97
24	7.45	1.84	4.45	7.03	0.70	3.81	5.51	0.10	3.00	6.48	1.08	4.16
25	7.22	1.92	4.46	6.56	0.56	3.48	5.02	0.05	2.94	6.41	0.91	3.79
26	7.16	1.86	4.59	5.78	0.48	3.19	5.24	0.06	2.92	6.51	0.93	3.48
27	7.19	1.50	4.53	5.56	0.76	3.30	5.57	0.26	2.93	6.63	0.87	3.21
28	7.39	1.25	4.51	5.07	0.48	3.14	6.02	0.30	2.92	7.00	0.36	3.14
29	---	---	---	6.07	0.59	3.29	6.62	0.52	3.08	6.29	-0.03	3.40
30	---	---	---	6.28	0.86	3.76	6.99	0.03	3.22	7.02	-0.04	3.57
31	---	---	---	6.57	0.59	3.67	---	---	---	7.97	-0.05	3.65
MONTH	8.72	0.59	---	9.35	0.44	4.32	8.19	-0.13	3.77	8.87	-0.05	4.00

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.25	-0.02	3.40	8.18	-0.07	3.73	7.49	0.25	4.00	6.90	0.23	3.49
2	8.41	-0.01	3.93	8.08	-0.01	3.92	7.35	0.48	4.02	6.54	0.10	3.09
3	8.23	-0.06	3.85	7.79	0.04	4.03	7.18	0.65	3.81	6.04	0.03	3.02
4	7.75	-0.08	3.91	7.08	-0.01	3.67	6.98	0.98	3.69	5.87	0.04	2.97
5	7.43	0.16	4.05	6.79	-0.03	3.52	6.43	0.70	3.30	6.27	0.41	3.49
6	6.76	0.04	3.74	6.90	0.55	3.58	6.51	0.49	3.29	5.84	0.48	3.24
7	6.88	0.31	3.66	6.74	0.89	3.42	6.69	0.58	3.50	5.78	0.18	3.00
8	6.88	0.46	3.59	6.45	0.70	3.20	6.63	0.63	3.57	5.68	-0.03	2.72
9	6.60	1.07	3.38	6.62	0.27	3.15	6.96	0.41	3.51	5.95	-0.10	2.56
10	6.41	0.40	2.98	6.49	0.34	3.25	6.89	0.32	3.46	6.24	-0.13	2.92
11	7.07	-0.01	3.24	6.37	-0.02	3.12	6.87	0.10	3.44	6.71	0.06	3.25
12	7.48	0.46	3.75	6.63	-0.01	3.07	6.85	-0.04	3.39	6.75	0.06	3.39
13	7.48	0.42	3.88	6.87	-0.02	3.34	7.05	-0.09	3.42	7.19	0.28	3.60
14	7.50	0.27	3.91	7.11	-0.03	3.54	7.07	-0.01	3.32	7.33	0.31	3.70
15	7.51	0.19	4.00	6.93	-0.01	3.43	6.48	-0.07	3.33	6.91	-0.01	3.66
16	7.86	0.52	4.33	7.23	-0.04	3.65	6.92	0.17	3.62	7.49	-0.02	3.62
17	7.76	0.37	3.96	7.40	0.10	4.00	7.00	-0.13	3.64	7.37	-0.07	3.74
18	7.00	-0.05	3.59	7.40	0.54	4.14	6.96	0.43	3.54	7.23	0.29	3.79
19	7.03	0.18	3.79	7.06	0.65	4.09	6.79	0.35	3.28	7.42	0.28	3.95
20	6.53	-0.01	3.60	7.06	0.73	3.99	6.91	0.12	3.27	7.28	0.75	4.21
21	6.39	0.41	3.73	6.76	0.53	3.52	6.77	0.22	3.28	7.03	0.43	3.79
22	6.60	0.81	3.76	6.74	0.67	3.32	6.76	-0.01	3.24	7.36	0.27	3.71
23	6.73	0.65	3.58	6.85	0.45	3.26	7.09	0.01	3.40	7.34	0.36	3.75
24	7.16	1.29	3.70	6.87	0.25	3.22	7.51	-0.08	3.47	7.45	0.65	3.97
25	7.59	0.97	3.80	7.18	-0.01	---	7.52	-0.02	3.50	7.48	0.49	3.78
26	7.86	0.74	3.88	7.49	-0.07	3.30	7.13	-0.02	3.35	7.41	0.24	3.66
27	7.91	0.34	3.79	7.99	-0.03	3.54	7.51	-0.01	3.29	7.52	0.22	3.72
28	8.00	0.04	3.65	7.70	-0.06	3.67	7.32	-0.04	3.39	7.46	-0.19	3.74
29	7.92	-0.03	3.74	8.06	-0.01	3.68	7.37	0.15	3.74	7.22	-0.04	3.64
30	8.29	-0.02	3.83	8.01	-0.07	3.64	7.54	0.57	3.97	6.82	-0.08	3.44
31	---	---	---	7.82	0.10	3.95	7.51	0.60	3.94	---	---	---
MONTH	8.41	-0.08	3.73	8.18	-0.07	3.56	7.54	-0.13	3.51	7.52	-0.19	3.48
YEAR	11.96	-0.19	4.11									

14248700 BEAR CREEK NEAR SVENSEN, OREG.

LOCATION.--Lat 46°06'48", long 123°37'55", in NE¼NE¼ sec.11, T.7 N., R.8 W., Clatsop County, on right bank 0.5 mi (0.8 km) upstream from the Astoria Reservoir Dam, 3.8 mi (6.1 km) southeast of Svensen, and at mile 5.4 (8.7 km).

DRAINAGE AREA.--3.33 mi^2 (8.62 km^2).

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 17.4 ft^3/s (0.49 m^3/s), 70.96 in/yr (1,802 mm/yr), 12,610 acre-ft/yr (15.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 147 ft^3/s (4.16 m^3/s) Dec. 21, gage height, 2.72 ft (0.829 m); minimum, 2.4 ft^3/s (0.068 m^3/s) Oct. 1-3.

Period of record: Maximum discharge, 342 ft^3/s (9.69 m^3/s) Jan. 11, 1972, gage height, 3.42 ft; minimum, 1.2 ft^3/s (0.034 m^3/s) Sept. 8, 9, 1967.

REMARKS.--Records good. Flow regulated by Wickiup Lake and Middle Lake. No diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	5.6	11	34	22	15	11	9.6	6.5	6.2	4.4	3.7
2	2.4	5.3	17	34	21	15	11	9.6	6.5	5.8	4.4	3.7
3	2.8	6.3	14	31	21	14	11	9.6	6.5	5.8	4.1	3.7
4	3.8	14	13	29	20	13	11	9.2	6.5	5.5	4.1	3.9
5	3.8	6.6	13	29	19	13	11	9.6	6.2	5.5	4.1	4.9
6	4.4	5.0	12	27	18	12	11	9.6	6.2	5.5	4.4	8.3
7	5.0	4.7	11	26	18	12	11	9.6	6.2	5.5	4.1	9.2
8	5.3	4.4	11	24	18	11	11	10	6.8	5.5	4.1	8.8
9	5.3	5.0	11	23	18	12	11	10	6.2	5.2	4.1	8.3
10	4.7	5.9	10	22	18	21	11	10	5.8	5.2	4.1	8.3
11	5.0	5.0	10	24	18	16	11	9.6	5.5	5.2	4.1	8.3
12	5.9	4.7	10	29	17	15	10	9.2	8.0	5.2	4.1	6.8
13	6.3	4.7	10	38	17	16	9.6	9.2	6.8	5.2	3.9	3.7
14	6.3	4.7	10	29	16	15	9.6	8.8	6.2	4.9	3.9	3.4
15	6.3	5.0	9.9	30	16	14	9.6	8.8	6.2	4.9	3.9	3.4
16	6.3	5.0	16	29	16	17	11	8.3	8.3	4.9	3.9	3.4
17	5.9	5.3	19	28	16	15	12	8.3	11	4.9	3.9	3.7
18	5.9	6.6	27	28	15	17	17	8.3	8.3	4.9	3.7	3.7
19	5.6	6.3	27	28	15	22	15	8.3	7.6	4.7	3.7	5.8
20	5.6	6.3	28	28	14	19	13	8.3	6.8	4.7	3.7	12
21	5.6	7.0	94	27	14	17	12	8.3	6.5	4.7	3.7	7.2
22	5.6	6.6	49	26	14	14	12	8.0	6.5	4.7	3.7	5.2
23	5.6	7.0	55	25	14	13	12	9.2	6.5	4.7	3.9	4.7
24	5.6	7.0	45	30	13	12	11	11	6.8	4.7	4.4	8.0
25	5.6	32	34	28	15	12	11	9.2	8.3	4.4	4.4	5.2
26	5.9	25	70	25	15	11	11	8.0	7.2	4.4	3.9	4.4
27	5.3	16	66	25	15	12	11	7.6	6.8	4.4	3.9	4.1
28	6.3	13	54	24	14	12	10	7.2	6.2	4.4	3.9	3.9
29	5.0	11	43	22	------	11	9.6	6.8	6.2	4.4	3.9	3.9
30	4.4	10	39	24	------	11	9.6	6.8	6.2	4.4	3.9	3.9
31	4.4	------	35	24	------	12	------	6.5	------	4.4	3.9	------
TOTAL	158.3	251.0	873.9	850	467	441	337.0	272.5	205.3	154.8	124.2	167.5
MEAN	5.11	8.37	28.2	27.4	16.7	14.2	11.2	8.79	6.84	4.99	4.01	5.58
MAX	6.3	32	94	38	22	22	17	11	11	6.2	4.4	12
MIN	2.4	4.4	9.9	22	13	11	9.6	6.5	5.5	4.4	3.7	3.4
CFSM	1.53	2.51	8.47	8.23	5.02	4.26	3.36	2.64	2.05	1.50	1.20	1.68
IN.	1.77	2.80	9.76	9.50	5.22	4.93	3.76	3.04	2.29	1.73	1.39	1.87
AC-FT	314	498	1,730	1,690	926	875	668	541	407	307	246	332

CAL YR 1972 TOTAL 7,596.0 MEAN 20.8 MAX 220 MIN 2.4 CFSM 6.25 IN 84.86 AC-FT 15,070
WTR YR 1973 TOTAL 4,302.5 MEAN 11.8 MAX 94 MIN 2.4 CFSM 3.54 IN 48.06 AC-FT 8,530

PEAK DISCHARGE (BASE, 100 CFS).--Dec. 21 (0800) 147 cfs (2.72 ft).

NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OREG.

LOCATION.--Lat 45°42'15", long 123°45'15", in NW¼ sec.35, T.3 N., R.9 W., Tillamook County, on right bank 0.2 mi (0.3 km) upstream from Cook Creek, 2.2 mi (3.5 km) northeast of Foss, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--667 mi² (1,728 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 32.60 ft (9.936 m) above mean sea level (State Highway Department bench mark). Prior to Nov. 11, 1939, nonrecording gage.

AVERAGE DISCHARGE.--34 years, 2,745 ft³/s (77.7 m³/s), 55.89 in/yr (1,420 mm/yr), 1,989,000 acre-ft/yr (2.45 km³/yr).

EXTREMES.--Current year: Maximum discharge, 31,200 ft³/s (884 m³/s) Dec. 21, gage height, 18.39 ft (5.605 m); minimum, 65 ft³/s (1.84 m³/s) Sept. 16, 17.
Period of record: Maximum discharge, 46,900 ft³/s (1,328 m³/s) Jan. 20, 1972, gage height, 23.11 ft (7.044 m); minimum, 34 ft³/s (0.96 m³/s) Aug. 29-31, 1967.

REMARKS.--Records good. No regulation. Several small diversions for irrigation and domestic use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	270	1.310	5.880	2.810	2.520	1.780	933	479	398	125	104
2	234	571	1.430	5.110	2.470	3.460	1.780	880	467	376	118	97
3	216	828	1.400	4.630	2.210	3.630	1.660	850	461	359	114	91
4	198	2.700	1.300	4.070	2.020	3.240	1.540	813	449	343	111	88
5	184	2.190	1.180	3.580	1.840	2.830	1.450	792	425	326	111	82
6	171	1.600	900	3.110	1.680	2.500	1.370	757	409	315	114	82
7	163	1.720	700	2.680	1.560	2.220	1.270	736	398	315	114	91
8	151	1.610	600	2.330	1.450	1.970	1.190	813	398	305	114	85
9	147	1.520	550	2.020	1.390	1.790	1.130	933	392	300	111	85
10	147	1.790	500	1.890	1.390	2.430	1.070	1.030	376	285	107	85
11	147	1.580	480	1.950	1.510	2.690	1.010	933	354	275	107	76
12	143	1.310	460	4.710	1.420	2.500	955	850	387	261	104	76
13	139	1.080	440	11.600	1.320	2.630	910	771	414	247	100	76
14	139	925	440	12.100	1.240	2.640	873	715	398	234	100	73
15	135	806	666	9.550	1.190	2.470	843	659	392	220	97	70
16	132	722	1.530	8.220	1.140	2.480	955	617	443	207	97	67
17	121	659	4.940	7.200	1.150	2.580	1.260	584	687	198	100	67
18	118	659	6.460	6.250	1.150	2.760	1.680	558	750	189	97	73
19	114	736	10.200	5.840	1.110	3.790	2.370	533	673	180	94	97
20	114	673	10.800	5.420	1.050	3.820	2.470	539	571	180	94	584
21	118	666	20.200	5.320	1.000	3.490	2.150	527	491	180	91	1.060
22	114	631	24.000	4.900	963	3.100	1.900	509	437	184	88	701
23	114	610	18.600	4.340	933	2.690	1.710	545	409	189	88	715
24	114	591	17.700	5.610	910	2.370	1.540	895	414	184	100	910
25	114	1.610	14.000	6.200	1.160	2.110	1.410	850	515	184	198	1.110
26	139	5.300	13.900	5.340	1.610	1.900	1.300	778	558	175	211	764
27	167	3.710	18.900	4.590	2.090	1.780	1.210	680	552	163	143	584
28	256	2.610	17.800	3.970	2.050	1.760	1.130	624	497	155	159	461
29	295	1.910	13.200	3.470	------	1.650	1.050	578	449	143	147	381
30	261	1.530	9.390	3.210	------	1.560	986	539	420	135	128	326
31	243	------	7.420	3.150	------	1.600	------	503	------	128	118	------
TOTAL	5.100	43.117	221.396	158.240	41.816	78.960	41.952	22.324	14.065	7.333	3.600	9.161
MEAN	165	1.437	7.142	5.105	1.493	2.547	1.398	720	469	237	116	305
MAX	295	5.300	24.000	12.100	2.810	3.820	2.470	1.030	750	398	211	1.110
MIN	114	270	440	1.890	910	1.560	843	503	354	128	88	67
CFSM	.25	2.15	10.7	7.65	2.24	3.82	2.10	1.08	.70	.36	.17	.46
IN.	.28	2.40	12.35	8.83	2.33	4.40	2.34	1.25	.78	.41	.20	.51
AC-FT	10.120	85.520	439.100	313.900	82.940	156.600	83.210	44.280	27.900	14.550	7.140	18.170

CAL YR 1972 TOTAL 1.208.574 MEAN 3.302 MAX 68.200 MIN 44 CFSM 4.95 IN 67.40 AC-FT 2.397.000
WTR YR 1973 TOTAL 647.064 MEAN 1.773 MAX 24.000 MIN 67 CFSM 2.66 IN 36.09 AC-FT 1.283.000

PEAK DISCHARGE (BASE, 19,000 CFS).--Dec. 21 (2100) 31,200 cfs (18.39 ft); Dec. 27 (2000) 19,500 cfs (14.19 ft)

14301500 WILSON RIVER NEAR TILLAMOOK, OREG.

LOCATION.--Lat 45°29'05", long 123°41'20", in SW¼SE¼ sec.8, T.1 S., R.8 W., Tillamook County, on right bank 0.2 mi (0.3 km) upstream from Negro Jack Creek, 8.0 mi (12.9 km) east of Tillamook, and at mile 11.4 (18.3 km).

DRAINAGE AREA.--161 mi^2 (417 km^2), at cableway, 2.0 mi (3.2 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--October 1914 to September 1915, August to November 1916, July 1931 to current year. Prior to January 1915 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 71.89 ft (21.912 m) above mean sea level. Dec. 18, 1914, to Nov. 4, 1916, nonrecording gage at site 2.8 mi (4.5 km) downstream at different datum. July 30, 1931, to Sept. 30, 1938, nonrecording gage at site 2.82 mi (4.54 km) downstream at datum 28.83 ft (8.787 m) lower. Oct. 1, 1938, to Oct. 17, 1968, water-stage recorder at site 2.1 mi (3.4 km) downstream at datum 29.76 ft (9.071 m) lower.

AVERAGE DISCHARGE.--43 years (1914-15, 1931-73), 1,216 ft^3/s (34.4 m^3/s), 102.57 in/yr (2,605 mm/yr), 881,000 acre-ft/yr (1.09 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 22,000 ft^3/s (623 m^3/s) Dec. 21, gage height, 13.93 ft (4.246 m); minimum, 32 ft^3/s (0.91 m^3/s) Sept. 5.

Period of record: Maximum discharge, 36,000 ft^3/s (1,020 m^3/s) Jan. 20, 1972, gage height, 16.91 ft (5.154 m); maximum gage height, 20.26 ft (6.175 m) Dec. 22, 1964 (site and datum then in use); minimum discharge, 32 ft^3/s (0.91 m^3/s) Sept. 5, 1973, but may have been less for short period following a landslide Jan. 31, 1965.

Flood in February 1916 reached a stage of 20.8 ft (6.34 m), from floodmarks, site and datum then in use.

REMARKS.--Records good. No regulation. Small diversions for domestic use above station.

REVISIONS (WATER YEARS).--WSP 1398: 1953. WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	272	725	1.740	946	1.190	830	434	270	344	132	48
2	154	622	860	1.680	865	1.430	795	410	259	317	128	43
3	144	805	780	1.650	820	1.290	750	410	254	297	128	40
4	134	2.040	680	1.640	760	1.200	705	384	242	275	128	37
5	124	1.490	617	1.580	715	2.290	653	362	230	262	115	36
6	117	1.030	570	1.460	685	1.010	613	365	220	254	100	52
7	113	1.290	506	1.350	635	892	570	356	218	247	103	85
8	108	1.290	452	1.300	604	810	538	441	220	240	103	79
9	106	1.110	434	1.250	595	775	506	498	206	230	100	76
10	106	1.260	400	1.200	622	1.400	482	546	197	218	96	73
11	108	1.150	385	2.900	644	1.510	456	494	191	211	90	70
12	102	865	375	9.120	613	1.390	434	445	220	202	91	70
13	97	715	365	5.740	578	1.390	417	410	228	195	88	70
14	96	590	355	5.520	554	1.300	400	381	218	188	87	70
15	94	506	345	3.540	538	1.200	390	356	220	180	84	71
16	88	448	1.320	3.010	518	1.180	534	335	323	178	88	68
17	85	407	3.860	2.630	566	1.180	780	317	590	174	88	69
18	84	452	4.350	2.360	558	1.220	1.030	302	546	172	81	77
19	84	578	6.440	2.100	506	1.580	1.240	291	431	168	77	86
20	83	518	5.900	1.930	478	1.500	1.170	288	362	166	73	409
21	87	510	17.000	1.970	452	1.390	1.040	272	314	160	69	704
22	85	466	9.700	1.680	434	1.250	934	264	283	152	67	448
23	83	470	7.340	1.470	420	1.130	830	317	267	150	64	502
24	78	434	7.260	2.260	417	1.020	735	640	311	142	83	912
25	78	1.160	5.040	2.540	685	922	662	534	518	144	88	809
26	97	2.920	6.260	1.940	892	835	604	431	538	150	72	486
27	103	1.800	7.800	1.560	976	800	554	384	474	146	63	354
28	170	1.310	5.220	1.350	886	760	518	356	424	140	60	285
29	184	1.010	3.390	1.180	------	705	486	326	394	134	56	243
30	158	825	2.590	1.130	------	710	459	300	368	134	53	215
31	128	------	2.080	1.080	------	775	------	283	------	130	53	------
TOTAL	3.440	28.343	103.399	71.860	17.962	36.034	20.115	11.932	9.536	6.100	2.708	6.587
MEAN	111	945	3.335	2.318	642	1.162	671	385	318	197	87.4	220
MAX	184	2.920	17.000	9.120	976	2.290	1.240	640	590	344	132	912
MIN	78	272	345	1.080	417	705	390	264	191	130	53	36
CFSM	.69	5.87	20.7	14.4	3.99	7.22	4.17	2.39	1.98	1.22	.54	1.37
IN.	.79	6.55	23.89	16.60	4.15	8.33	4.65	2.76	2.20	1.41	.63	1.52
AC-FT	6.820	56.220	205.100	142.500	35.630	71.470	39.900	23.670	18.910	12.100	5.370	13.070

CAL YR 1972 TOTAL 553.880 MEAN 1.513 MAX 26.000 MIN 50 CFSM 9.40 IN 127.98 AC-FT 1.099.000
WTR YR 1973 TOTAL 318.016 MEAN 871 MAX 17.000 MIN 36 CFSM 5.41 IN 73.48 AC-FT 630.800

PEAK DISCHARGE (BASE, 12,000 CFS).--Dec. 21 (1330) 22,000 cfs (13.93 ft).

14302800 MCGUIRE LAKE NEAR FAIRDALE, OREG.

LOCATION.--Lat 45°18'30", long 123°24'30", in NW¼SE¼ sec.15, T.3 S., R.6 W., Yamhill County, on control tower in reservoir on Nestucca River, 0.3 mi (0.5 km) upstream from Walker Creek, and 5.0 mi (8.0 km) southwest of Fairdale.

DRAINAGE AREA.--2.85 mi² (7.38 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents observed, 2,360 acre-ft (2.91 hm³) May 29 to June 7, elevation, 1,853.5 ft (564.95 m); minimum observed, reservoir empty Nov. 9 to Jan. 23.
Period of record: Maximum contents observed, 3,890 acre-ft (4.80 hm³) Mar. 12, 1972, elevation, elevation, 1,865.8 ft (568.70 m); no contents most of time during winter months.

REMARKS.--Reservoir is formed by earthfill dam with ungated spillway. Capacity of reservoir is 3,840 acre-ft (4.73 hm³) between elevations 1,810.0 ft (551.69 m) and 1,865.5 ft (568.60 m). Dead storage negligible. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be temporary storage. Water is used during summer months for municipal supply of city of McMinnville.

COOPERATION.--Elevation and capacity table furnished by city of McMinnville, Water and Light Department.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	1,837.6	1,040	-
Oct. 31	1,823.0	325	-715
Nov. 30	-	0	-325
Dec. 31	-	0	0
CAL YR 1972	-	-	0
Jan. 31	1,823.9	356	+356
Feb. 28	1,835.5	910	+554
Mar. 31	1,848.4	1,870	+960
Apr. 30	1,852.2	2,230	+360
May 31	1,853.5	2,360	+130
June 30	1,853.0	2,310	-50
July 31	1,849.3	1,950	-360
Aug. 31	1,841.3	1,290	-660
Sept.30	1,834.4	844	-446
WTR YR 1973	-	-	-196

14302900 NESTUCCA RIVER NEAR FAIRDALE, OREG.

LOCATION.--Lat 45°18'40", long 123°25'05", in SW¼NW¼ sec.15, T.3 S., R.6 W., Yamhill County, on right bank 100 ft (30 m) upstream from former Meadow Lake, 0.4 mi (0.6 km) downstream from Walker Creek, 5.3 mi (8.5 km) southwest of Fairdale, and at mile 49.3 (79.3 km).

DRAINAGE AREA.--6.18 mi² (16.01 km²).

PERIOD OF RECORD.--June 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,778.99 ft (542.236 m) above mean sea level (levels by city of McMinnville).

AVERAGE DISCHARGE.--13 years, 33.3 ft³/s (0.94 m³/s), *75.17 in/yr (1,859 mm/yr)*, 24,130 acre-ft/yr (29.8 hm³/yr), adjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 360 ft³/s (10.2 m³/s) Dec. 21, gage height, 7.19 ft (2.192 m); minimum, 2.1 ft³/s (0.059 m³/s) Sept. 6, 8.
Period of record: Maximum discharge, 876 ft³/s (24.8 m³/s) Dec. 22, 1964, gage height, 10.43 ft (3.179 m); minimum, 0.87 ft³/s (0.025 m³/s) July 17, 1968.

REMARKS.--Records fair. Flow regulated since March 1969 by McGuire Lake about 1 mi (1.6 km) above station (see station 14302800); during winter months lake is empty except when inflow exceeds capacity of outlet tunnel.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	17	21	79	21	40	15	8.8	5.1	4.6	3.5	2.9
2	17	17	28	51	16	37	14	8.2	5.3	4.4	3.3	2.8
3	16	29	20	39	15	36	13	7.7	5.1	4.2	3.2	2.7
4	15	47	17	35	15	30	13	7.4	4.9	4.0	3.2	2.7
5	15	34	15	31	13	26	12	7.2	4.7	4.1	3.2	2.7
6	15	63	14	29	12	25	12	7.2	4.6	4.1	3.2	2.6
7	14	90	12	28	11	21	11	6.9	4.7	4.1	3.2	2.8
8	14	63	11	28	9.8	18	11	9.6	4.6	4.1	3.2	2.4
9	14	42	10	23	11	17	9.8	9.6	4.6	4.1	3.2	2.4
10	14	57	9.5	19	13	27	9.4	8.8	4.6	4.0	3.2	2.5
11	14	34	9.5	34	11	23	9.0	7.4	4.4	3.8	3.2	2.7
12	14	24	9.5	112	10	22	8.5	6.9	4.9	3.8	3.4	2.8
13	13	22	9.0	159	9.4	23	8.5	6.5	4.6	3.7	3.3	3.0
14	13	17	9.0	128	9.4	20	8.2	6.1	4.6	3.7	3.3	2.9
15	13	13	9.0	108	9.1	19	7.9	5.9	4.6	3.5	3.2	2.9
16	13	12	22	101	8.5	19	13	5.7	6.1	3.5	3.2	2.8
17	13	10	78	93	8.8	17	20	5.5	9.0	3.7	3.2	2.8
18	13	35	108	81	8.2	21	26	5.3	6.7	3.7	3.2	2.9
19	12	39	142	68	7.6	23	27	5.3	5.5	3.8	3.2	3.7
20	12	25	149	62	7.3	23	22	5.5	5.1	3.8	3.0	19
21	12	27	302	56	6.7	22	20	4.9	4.7	3.6	2.9	29
22	12	21	233	46	6.4	21	17	4.9	4.6	3.6	2.8	30
23	12	20	185	35	6.1	19	16	6.5	4.6	3.6	2.9	32
24	12	17	169	56	6.1	18	14	9.6	5.3	3.5	3.7	51
25	11	54	137	51	28	17	14	6.9	7.9	3.5	3.4	38
26	12	82	174	43	27	16	12	6.3	6.3	3.5	3.0	31
27	12	52	207	35	26	17	11	5.9	5.5	3.5	3.2	25
28	13	39	170	31	23	16	9.6	5.7	5.1	3.5	3.2	23
29	12	29	133	27	------	15	8.2	5.3	4.7	3.5	3.0	20
30	11	23	116	29	------	15	9.6	5.1	4.7	3.7	3.0	18
31	13	------	98	26	------	17	------	5.1	------	3.7	2.9	------
TOTAL	415	1.054	2.626.5	1.743	355.4	680	401.7	207.7	157.1	117.9	98.6	369.0
MEAN	13.4	35.1	84.7	56.2	12.7	21.9	13.4	6.70	5.24	3.80	3.18	12.3
MAX	19	90	302	159	28	40	27	9.6	9.0	4.6	3.7	51
MIN	11	10	9.0	19	6.1	15	7.9	4.9	4.4	3.5	2.8	2.4
AC-FT	823	2.090	5.210	3.460	705	1.350	797	412	312	234	196	732
MEAN†	1.76	29.7	84.7	62.0	23.1	37.5	19.4	8.81	5.54	2.63	.55	8.30
CFSM†	.28	4.81	13.7	10.0	3.74	6.07	3.14	1.43	.90	.43	.09	1.34
IN.†	.33	5.35	15.81	11.58	3.89	7.01	3.51	1.64	1.00	.49	.10	1.50
AC-FT†	108	1,765	5,210	3,816	1,283	2,310	1,157	542	330	162	34	494

CAL YR 1972 TOTAL 13,561.6 MEAN 37.1 MAX 369 MIN 5.6 AC-FT 26,900 MEAN† 38.4 CFSM† 6.21 IN.† 84.65 AC-FT† 27,900
WTR YR 1973 TOTAL 8,225.9 MEAN 22.5 MAX 302 MIN 2.4 AC-FT 16,320 MEAN† 23.8 CFSM† 3.85 IN.† 52.21 AC-FT† 17,210

† Adjusted for storage and diversion by McGuire Lake.

14303600 NESTUCCA RIVER NEAR BEAVER, OREG.

LOCATION.--Lat 45°16'00", long 123°50'45", in SE¼NE¼ sec.36, T.3 S., R.10 W., Tillamook County, on right bank 150 ft (46 m) upstream from Saling Creek, 1.2 mi (1.9 km) southwest of Beaver, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--180 mi^2 (466 km^2).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 43 ft (13 m), from river profile map.

AVERAGE DISCHARGE.--9 years, 1,122 ft^3/s (31.8 m^3/s), 84.65 in/yr (2,150 mm/yr), 812,900 acre-ft/yr (1.00 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,100 ft^3/s (484 m^3/s) Dec. 21, gage height, 15.72 ft (4.791 m); minimum, 59 ft^3/s (1.67 m^3/s) Sept. 16, 17.

Period of record: Maximum discharge, 29,400 ft^3/s (833 m^3/s) Jan. 11, 1972, gage height, 22.0 ft (6.71 m), from floodmark; minimum, 32 ft^3/s (0.91 m^3/s) Sept. 14, 1967.

Flood of Nov. 20, 1962, reached a stage of 23.4 ft (7.13 m), discharge, 32,500 ft^3/s (920 m^3/s), caused by failure of Meadow Lake Dam.

REMARKS.--Records excellent. No regulation. Small diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	179	977	2,040	989	874	904	461	263	306	111	86
2	179	330	1,160	1,900	919	989	844	439	259	284	108	82
3	169	575	1,050	1,660	866	958	802	434	251	267	106	78
4	158	1,350	956	1,430	809	942	753	413	239	255	106	76
5	148	991	900	1,330	760	802	720	388	228	247	103	74
6	141	795	700	1,190	720	889	682	379	217	239	103	84
7	134	907	650	1,080	626	823	632	374	214	232	103	106
8	130	865	650	973	644	767	602	423	217	225	101	92
9	127	816	600	904	620	760	572	434	210	217	99	84
10	137	963	600	866	632	1,330	541	423	196	207	101	78
11	144	872	550	1,050	602	1,270	511	379	193	200	99	76
12	130	753	550	2,360	566	1,190	488	351	225	189	97	76
13	124	684	520	5,550	529	1,270	472	329	221	182	94	76
14	118	608	520	4,380	517	1,210	444	315	221	171	94	76
15	115	542	505	3,340	506	1,130	429	302	236	165	92	76
16	112	495	844	2,860	483	1,170	547	288	333	161	92	72
17	109	455	1,770	2,450	494	1,160	650	276	477	158	94	72
18	109	564	2,270	2,290	472	1,270	809	267	408	152	92	82
19	106	795	3,320	2,110	444	1,720	1,090	263	333	152	90	116
20	106	636	3,710	1,920	429	1,640	958	271	288	152	88	379
21	115	636	14,300	1,790	408	1,520	866	255	263	152	86	585
22	112	597	10,200	1,610	398	1,370	809	243	243	149	86	351
23	106	592	7,390	1,450	384	1,230	753	320	239	143	84	597
24	103	559	6,470	1,710	384	1,130	701	694	263	137	121	1,050
25	106	1,200	4,850	1,670	682	1,030	650	483	547	131	137	809
26	121	3,030	6,140	1,490	682	950	614	398	494	126	103	529
27	130	1,920	8,030	1,350	701	965	579	355	434	123	94	403
28	208	1,500	6,180	1,220	650	904	541	333	384	121	90	337
29	200	1,240	4,260	1,130	------	823	511	306	351	116	88	293
30	155	1,080	3,220	1,130	------	816	483	284	329	113	86	259
31	130	------	2,500	1,110	------	896	------	271	------	111	90	------
TOTAL	4,175	26,529	96,342	57,343	16,916	33,798	19,957	11,151	8,776	5,583	3,038	7,154
MEAN	135	884	3,108	1,850	604	1,090	665	360	293	180	98.0	238
MAX	208	3,030	14,300	5,550	989	1,720	1,090	694	547	306	137	1,050
MIN	103	179	505	866	384	760	429	243	193	111	84	72
CFSM	.75	4.91	17.3	10.3	3.36	6.06	3.69	2.00	1.63	1.00	.54	1.32
IN.	.86	5.48	19.91	11.85	3.50	6.98	4.12	2.30	1.81	1.15	.63	1.48
AC-FT	8,280	52,620	191,100	113,700	33,550	67,040	39,580	22,120	17,410	11,070	6,030	14,190

CAL YR 1972 TOTAL 520,656 MEAN 1,423 MAX 19,700 MIN 57 CFSM 7.91 IN 107.60 AC-FT 1,033,000
WTR YR 1973 TOTAL 290,762 MEAN 797 MAX 14,300 MIN 72 CFSM 4.43 IN 60.09 AC-FT 576,700

PEAK DISCHARGE (BASE, 8,000 CFS).--Dec. 21 (1230) 17,200 cfs (15.72 ft).

14305500 SILETZ RIVER AT SILETZ, OREG.

LOCATION.--Lat 44°42'55", long 123°53'10", in NW¼SW¼ sec.11, T.10 S., R.10 W., Lincoln County, on right bank, 1.8 mi (2.9 km) downstream from Baker Creek, 1.5 mi (2.4 km) east of Siletz, and at mile 42.6 (68.5 km).

DRAINAGE AREA.--202 mi² (523 km²).

PERIOD OF RECORD.--October 1905 to November 1911, January to May 1912, January to June 1924, November 1924 to current year. Prior to December 1905 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 102.32 ft (31.187 m) above mean sea level. Oct. 1, 1905, to Sept. 30, 1938, nonrecording gages at various sites within 2.5 mi (4.0 km) downstream at different datums.

AVERAGE DISCHARGE.--54 years (1905-11, 1925-73), 1,579 ft³/s (44.7 m³/s), 106.15 in/yr (2,696 mm/yr), 1,144,000 acre-ft/yr (1.41 km³/yr).

EXTREMES.--Current year: Maximum discharge, 19,700 ft³/s (558 m³/s) Dec. 21, gage height, 18.47 ft (5.630 m); minimum, 78 ft³/s (2.21 m³/s) Sept. 14.

Period of record: 1905-12, 1924-38. Maximum discharge, 34,600 ft³/s (980 m³/s) Nov. 22, 1909, gage height, 24.6 ft (7.50 m), site and datum then in use; minimum observed, 51 ft³/s (1.44 m³/s) Dec. 6, 7, 1929.

Period of record: 1938-73. Maximum discharge, 32,200 ft³/s (912 m³/s) Jan. 28, 1965, gage height, 27.32 ft (8.327 m), present site and datum; minimum, 48 ft³/s (1.36 m³/s) Sept. 25, 26, Oct. 4, 1965, Sept. 28, 29, 1967.

Flood of Nov. 20, 1921, reached a stage of 31.6 ft (9.63 m), at site 2.5 mi (4.0 km) downstream at different datum, from floodmark, discharge, 40,800 ft³/s (1,160 m³/s), from rating curve extended above 17,000 ft³/s (481 m³/s).

REMARKS.--Records excellent. Slight regulation from logponds. Small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1935: 1943, 1947-49(M), 1953-58(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	152	835	2,390	1,200	1,310	1,310	500	316	468	141	103
2	143	500	982	2,200	1,110	1,520	1,250	473	307	432	138	98
3	136	712	917	2,000	1,040	1,420	1,150	450	299	401	134	95
4	132	2,260	822	1,750	975	1,390	1,060	437	284	374	134	93
5	125	1,360	761	1,620	895	1,290	982	405	269	365	132	90
6	121	1,030	718	1,430	841	1,310	895	392	254	347	127	96
7	115	1,340	633	1,270	786	1,190	822	388	254	329	127	145
8	113	1,370	580	1,150	737	1,080	767	459	250	311	127	123
9	111	1,180	560	1,050	700	1,030	718	459	246	299	125	103
10	113	1,540	520	997	718	2,100	676	450	233	284	125	96
11	117	1,210	490	1,820	718	2,430	633	405	224	273	123	91
12	117	924	470	6,240	676	2,170	596	379	236	257	121	90
13	109	792	450	10,700	639	2,100	574	361	254	243	119	90
14	105	663	423	7,440	621	1,870	537	343	254	233	119	88
15	103	574	410	4,920	621	1,660	510	329	269	220	115	90
16	99	505	700	4,260	585	1,650	651	311	410	214	113	88
17	98	459	2,980	4,260	614	1,620	816	299	676	204	113	85
18	98	516	3,850	3,730	608	1,680	1,130	288	859	201	111	96
19	96	822	7,360	3,290	574	2,350	1,400	280	479	195	107	127
20	96	669	7,680	2,900	542	2,280	1,240	277	410	195	105	657
21	99	657	15,400	2,760	516	2,080	1,100	269	365	192	103	780
22	105	627	14,000	2,370	495	1,830	1,000	257	325	190	101	553
23	99	651	10,200	2,050	473	1,620	895	307	320	181	101	563
24	95	621	9,140	2,250	464	1,460	810	873	329	179	167	1,450
25	93	798	6,660	2,280	895	1,320	743	633	873	170	195	1,430
26	98	2,870	7,110	1,930	975	1,200	688	510	946	165	129	828
27	101	1,940	10,900	1,690	1,070	1,180	639	450	780	157	117	590
28	170	1,460	7,680	1,480	960	1,130	596	419	657	152	111	459
29	208	1,170	5,050	1,330	------	1,010	563	379	574	150	107	388
30	152	968	3,770	1,360	------	1,060	532	356	516	145	105	338
31	134	------	2,940	1,380	------	1,210	------	334	------	143	105	------
TOTAL	3,651	30,340	124,991	86,297	21,048	48,550	25,283	12,472	12,468	7,669	3,797	9,923
MEAN	118	1,011	4,032	2,784	752	1,566	843	402	416	247	122	331
MAX	208	2,870	15,400	10,700	1,200	2,430	1,400	873	946	468	195	1,450
MIN	93	152	410	997	464	1,010	510	257	224	143	101	85
CFSM	.58	5.01	20.0	13.8	3.72	7.75	4.17	1.99	2.06	1.22	.60	1.64
IN.	.67	5.59	23.02	15.89	3.88	8.94	4.66	2.30	2.30	1.41	.70	1.83
AC-FT	7,240	60,180	247,900	171,200	41,750	96,300	50,150	24,740	24,730	15,210	7,530	19,680

CAL YR 1972 TOTAL 663,238 MEAN 1,812 MAX 23,200 MIN 63 CFSM 8.97 IN 122.14 AC-FT 1,316,000
WTR YR 1973 TOTAL 386,489 MEAN 1,059 MAX 15,400 MIN 85 CFSM 5.24 IN 71.18 AC-FT 766,600

PEAK DISCHARGE (BASE, 14,000 CFS).--Dec. 21 (1530) 19,700 cfs (18.47 ft).

14306030 YAQUINA RIVER NEAR CHITWOOD, OREG.

LOCATION.--Lat 44°39'29", long 123°50'15", in NE¼SW¼ sec.31, T.10 S., R.9 W., Lincoln County, on left bank 200 ft (60 m) below Thornton Creek and 1.1 mi (1.8 km) west of Chitwood.

DRAINAGE AREA.--71.0 mi² (183.9 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 28.43 ft (8.665 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,870 ft³/s (81.3 m³/s) Dec. 21, gage height, 9.65 ft (2.941 m); minimum, 5.2 ft³/s (0.15 m³/s) Aug. 23.

REMARKS.--Records excellent. No regulation or diversion above station. Records of sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	15	67	446	215	192	231	99	34	28	7.8	8.4
2	9.0	25	67	409	208	239	234	93	34	25	7.2	7.8
3	8.4	48	70	409	200	250	225	93	34	24	7.2	6.7
4	8.4	110	65	409	187	236	210	93	33	22	7.2	6.7
5	8.4	78	61	384	173	213	195	86	31	22	7.2	6.1
6	7.8	46	61	338	163	205	179	82	28	21	6.7	6.7
7	7.2	41	53	292	154	187	166	78	28	19	6.7	9.7
8	7.2	50	51	264	142	176	156	82	30	19	6.7	14
9	7.2	46	54	242	134	168	146	86	30	18	6.7	10
10	7.8	78	56	220	134	278	139	86	27	16	6.7	8.4
11	10	65	54	242	127	352	132	74	25	15	7.2	7.2
12	11	48	50	574	122	332	125	68	25	15	7.2	6.7
13	11	39	47	1,450	115	320	120	65	27	15	7.2	6.1
14	9.7	34	45	1,170	108	295	113	63	28	14	7.2	7.2
15	9.0	31	44	812	104	278	106	59	30	13	7.2	7.8
16	9.0	28	54	685	99	275	115	57	43	11	6.7	7.8
17	8.4	25	192	841	104	272	132	53	78	11	6.7	7.8
18	9.0	31	307	798	101	272	163	51	63	10	6.1	8.4
19	9.0	44	591	776	95	446	220	50	43	11	5.7	11
20	9.0	43	761	696	91	532	208	50	34	12	5.7	27
21	9.7	43	2,480	598	86	459	190	48	30	12	6.1	31
22	11	48	2,000	490	86	375	173	46	28	12	5.7	30
23	12	48	1,490	418	82	316	158	51	28	11	5.7	41
24	12	46	1,530	381	84	275	146	70	31	10	15	57
25	11	51	1,290	335	156	244	137	63	53	9.7	21	65
26	13	200	1,090	292	173	218	130	51	59	7.8	15	36
27	14	163	1,740	269	163	213	120	46	48	9.0	9.7	24
28	27	115	1,590	247	154	198	113	44	41	9.0	8.4	21
29	31	91	1,060	228	------	179	108	41	33	8.4	7.8	16
30	19	74	754	228	------	179	104	38	30	7.8	7.8	15
31	15	------	570	234	------	208	------	36	------	7.2	7.8	------
TOTAL	350.9	1,804	18,344	15,177	3,760	8,382	4,694	2,002	1,086	444.9	247.0	517.5
MEAN	11.3	60.1	592	490	134	270	156	64.6	36.2	14.4	7.97	17.3
MAX	31	200	2,480	1,450	215	532	234	99	78	28	21	65
MIN	7.2	15	44	220	82	168	104	36	25	7.2	5.7	6.1
CFSM	.16	.85	8.34	6.90	1.89	3.80	2.20	.91	.51	.20	.11	.24
IN.	.18	.95	9.61	7.95	1.97	4.39	2.46	1.05	.57	.23	.13	.27
AC-FT	696	3,580	36,390	30,100	7,460	16,630	9,310	3,970	2,150	882	490	1,030

WTR YR 1973 TOTAL 56,809.3 MEAN 156 MAX 2,480 MIN 5.7 CFSM 2.20 IN 29.76 AC-FT 112,700

PEAK DISCHARGE (BASE, 3,300 CFS).--No peak above base.

14306036 MILL CREEK NEAR TOLEDO, OREG.

LOCATION.--Lat 44°34'35", long 123°54'25", in NW¼NE¼ sec.33, T.11 S., R.10 W., Lincoln County, on left bank 1,200 ft (366 m) downstream from diversion dam, and 3.5 mi (5.6 km) southeast of Toledo.

DRAINAGE AREA.--4.18 mi² (10.83 km²).

PERIOD OF RECORD.--October 1959 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (24.4 m), from topographic map. Prior to July 13, 1968, at site 1,200 ft (366 m) upstream at different datum.

AVERAGE DISCHARGE.--14 years, 21.2 ft³/s (0.600 m³/s), 68.87 in/yr (1,749 mm/yr), 15,360 acre-ft/yr (18.9 hm³/yr), adjusted for diversion.

EXTREMES.--Current year: Maximum discharge, 285 ft³/s (8.07 m³/s) Dec. 21, gage height, 4.19 ft (1.277 m); minimum, 0.26 ft³/s (0.007 m³/s) Aug. 23.

Period of record: Maximum discharge, 609 ft³/s (17.2 m³/s) Jan. 27, 1965, gage height, 5.83 ft (1.777 m), site and datum then in use, from rating curve extended above 65 ft³/s (1.84 m³/s) on basis of slope-area measurement of peak flow; no flow Sept. 27, Oct. 3, 4, 1961, Sept. 26, 1962.

REMARKS.--Records good. Monthly figures only are adjusted for diversion for city of Toledo municipal supply. Occasional fluctuation caused by city of Toledo diversion dam 1,200 ft (366 m) upstream, capacity, 250 acre-ft (308,000 m³).

COOPERATION.--Record of monthly diversion furnished by city of Toledo.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.5	3.6	29	15	15	18	6.6	3.9	5.7	2.7	2.3
2	2.8	2.6	2.9	25	14	18	18	7.4	4.1	5.5	2.6	2.3
3	2.7	8.1	3.1	23	14	17	16	5.7	3.6	4.9	2.6	2.3
4	2.5	11	3.1	22	12	17	15	6.0	3.5	4.8	2.5	2.3
5	2.4	9.5	3.2	21	11	16	13	6.0	3.6	4.8	2.5	2.2
6	2.3	13	3.2	18	11	16	12	5.5	3.3	4.5	2.7	2.2
7	2.3	7.7	3.1	17	10	15	11	5.1	3.5	4.4	2.5	2.3
8	2.2	7.7	3.0	15	9.5	15	11	5.3	3.7	4.3	2.1	2.3
9	2.1	6.8	2.9	15	9.1	14	10	5.3	3.7	4.1	2.1	2.2
10	1.5	6.6	2.9	14	9.5	37	9.1	5.3	3.6	3.6	2.1	2.2
11	1.5	5.5	2.8	17	9.5	36	8.8	5.3	3.2	3.4	2.0	2.0
12	1.1	4.8	2.8	55	9.1	30	8.1	4.9	3.3	3.3	2.0	2.0
13	.73	4.4	2.7	123	8.8	26	8.1	5.1	3.7	3.3	2.0	1.6
14	.62	4.1	3.2	90	8.4	24	7.4	4.6	3.9	3.2	2.0	1.8
15	.64	3.7	3.2	63	7.4	22	7.4	4.6	3.7	3.2	1.9	1.9
16	.83	3.5	3.4	60	7.7	23	7.4	4.6	3.9	3.1	1.6	1.8
17	.94	3.3	3.7	66	7.7	27	8.1	4.4	4.1	2.9	1.9	1.8
18	.98	3.9	3.7	58	7.7	30	8.4	4.3	6.0	3.1	1.8	2.0
19	1.2	4.6	17	54	7.0	58	11	4.8	6.0	3.1	1.9	1.9
20	1.2	4.3	66	48	7.0	46	12	4.5	5.5	3.1	1.8	2.2
21	1.2	4.0	230	42	6.4	36	11	3.9	4.9	3.2	1.6	2.2
22	1.0	3.9	181	35	6.6	29	11	3.6	4.4	3.2	1.8	2.2
23	.98	3.7	133	30	6.4	25	10	4.1	4.3	3.1	1.2	2.2
24	1.0	3.6	126	30	6.4	22	9.5	4.0	4.1	2.9	1.8	2.2
25	.90	4.1	87	28	10	19	8.8	4.1	8.4	2.8	2.3	2.2
26	1.0	12	109	24	16	18	8.1	4.1	11	2.6	2.3	2.0
27	1.2	9.1	173	22	15	16	7.7	4.1	10	2.5	2.4	2.0
28	1.4	5.3	116	19	13	15	7.4	4.1	8.4	2.6	2.3	2.1
29	1.3	4.8	75	18	------	14	7.0	4.1	6.8	2.9	2.2	2.0
30	1.3	4.5	54	18	------	14	6.6	4.0	6.2	3.0	2.2	1.9
31	1.4	------	38	17	------	16	------	3.7	------	2.8	2.3	------
TOTAL	46.22	171.6	1,461.5	1,116	275.2	726	306.9	149.1	148.3	109.9	65.7	62.6
MEAN	1.49	5.72	47.1	36.0	9.83	23.4	10.2	4.81	4.94	3.55	2.12	2.09
MAX	3.0	13	230	123	16	58	18	7.4	11	5.7	2.7	2.3
MIN	.62	1.5	2.7	14	6.4	14	6.6	3.6	3.2	2.5	1.2	1.6
AC-FT	92	340	2,900	2,210	546	1,440	609	296	294	218	130	124
MEAN†	1.62	5.77	47.6	36.6	10.3	23.9	10.8	5.58	5.37	4.26	2.62	2.49
CFSM†	.39	1.38	11.4	8.76	2.46	5.72	2.58	1.33	1.28	1.02	.63	.60
IN.†	.45	1.54	13.14	10.09	2.57	6.59	2.87	1.54	1.43	1.17	.72	.66
AC-FT†	99.8	344	2,930	2,250	573	1,470	640	343	320	262	161	148

CAL YR 1972 TOTAL 8,364.64 MEAN 22.9 MAX 306 MIN .62 AC-FT 16,590 MEAN† 23.1 CFSM† 5.53 IN.† 75.33 AC-FT† 16,790
WTR YR 1973 TOTAL 4,639.02 MEAN 12.7 MAX 230 MIN .62 AC-FT 9,200 MEAN† 13.2 CFSM† 3.16 IN.† 42.8 AC-FT† 9,541

PEAK DISCHARGE (BASE, 250 CFS).--Dec. 21 (0400) 285 cfs (4.19 ft).

† Adjusted for diversion to city of Toledo.

14306100 NORTH FORK ALSEA RIVER AT ALSEA, OREG.

LOCATION.--Lat 44°22'45", long 123°35'40", in SE¼ sec.1, T.14 S., R.8 W., Benton County, on left bank at Alsea, 0.2 mi (0.3 km) upstream from bridge on Lobster Valley Road, 0.7 mi (1.1 km) upstream from confluence with South Fork, and at mile 49.4 (79.5 km).

DRAINAGE AREA.--63.0 mi² (163 km²).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 272.31 ft (83.000 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 288 ft³/s (8.16 m³/s), 62.08 in/yr (1,577 mm/yr), 208,700 acre-ft/yr (257 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,670 ft³/s (75.6 m³/s) Jan. 13, gage height, 6.25 ft (1.905 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 11.

Period of record: Maximum discharge, 14,100 ft³/s (399 m³/s) Dec. 22, 1964, gage height, 14.57 ft (4.441 m), from rating curve extended above 2,900 ft³/s (82.1 m³/s) on basis of slope-area measurement at gage height 11.80 ft (3.597 m); minimum, 12 ft³/s (0.34 m³/s) Sept. 25, Oct. 2, 1965.

REMARKS.--Records good. No regulation. Some diversions by pumping above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	19	63	374	272	286	208	100	56	36	17	17
2	21	40	88	347	251	323	201	96	56	34	17	16
3	21	80	97	320	233	296	187	96	55	33	17	15
4	20	250	81	284	215	263	172	100	53	33	17	15
5	19	140	73	262	200	239	163	92	50	32	17	17
6	17	73	70	233	185	233	152	88	48	32	18	18
7	17	72	61	210	173	208	139	86	46	32	19	20
8	17	74	58	192	163	187	131	93	46	31	19	18
9	18	76	55	180	155	176	121	91	46	29	19	15
10	22	190	52	175	160	269	115	88	45	28	20	14
11	22	110	50	374	150	287	110	83	44	27	19	14
12	19	74	48	1.470	138	262	106	79	45	24	18	15
13	18	62	46	2.380	130	261	106	76	46	25	17	15
14	18	53	45	1.430	125	249	99	72	43	23	17	16
15	17	45	44	952	118	234	96	69	43	25	17	17
16	17	42	77	932	114	226	111	67	55	24	18	16
17	17	39	439	1.110	118	222	155	66	78	25	19	16
18	17	78	536	893	114	227	207	65	64	25	20	20
19	17	228	988	723	110	365	286	64	51	25	20	27
20	18	130	1.140	608	104	389	242	63	46	25	17	73
21	20	103	2.270	536	102	356	205	62	42	25	16	110
22	20	87	2.120	454	98	305	181	62	41	26	16	61
23	20	77	1.460	387	95	273	168	67	42	25	16	88
24	20	67	1.570	449	93	249	151	93	41	23	28	130
25	20	70	1.200	464	245	228	138	83	54	22	28	106
26	20	147	805	397	243	205	130	75	51	20	20	62
27	20	112	1.000	343	238	210	121	69	45	20	18	47
28	32	92	1.000	310	212	197	114	67	41	19	17	39
29	32	79	784	284	------	180	110	63	38	18	17	34
30	25	70	609	304	------	182	106	58	37	17	18	32
31	18	------	464	304	------	197	------	56	------	17	19	------
TOTAL	620	2.779	17.393	17.681	4.554	7.784	4.531	2.389	1.448	800	575	1.103
MEAN	20.0	92.6	561	570	163	251	151	77.1	48.3	25.8	18.5	36.8
MAX	32	250	2.270	2.380	272	389	286	100	78	36	28	130
MIN	17	19	44	175	93	176	96	56	37	17	16	14
CFSM	.32	1.47	8.90	9.05	2.59	3.98	2.40	1.22	.77	.41	.29	.58
IN.	.37	1.64	10.27	10.44	2.69	4.60	2.68	1.41	.86	.47	.34	.65
AC-FT	1.230	5.510	34.500	35.070	9.030	15.440	8.990	4.740	2.870	1.590	1.140	2.190

CAL YR 1972 TOTAL 120.785 MEAN 330 MAX 5.070 MIN 14 CFSM 5.24 IN 71.32 AC-FT 239.600
WTR YR 1973 TOTAL 61.657 MEAN 169 MAX 2.380 MIN 14 CFSM 2.68 IN 36.41 AC-FT 122.300

PEAK DISCHARGE (BASE, 2,000 CFS).--Dec. 21 (0230) 2,560 cfs (6.11 ft); Jan. 13 (1200) 2,670 cfs (6.25 ft).

14306400 FIVE RIVERS NEAR FISHER, OREG.

LOCATION.--Lat 44°20'15", long 123°49'35", W½ sec.19, T.14 S., R.9 W., Lincoln County, in Siuslaw National Forest, on left bank at downstream side of abandoned highway bridge, 500 ft (152 m) downstream from Lobster Creek, 3.2 mi (5.1 km) north of Fisher, and at mile 3.3 (5.3 km).

DRAINAGE AREA.--114 mi^2 (295 km^2)

PERIOD OF RECORD.--August 1958 to September 1963, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (39.6 m) from topographic map.

AVERAGE DISCHARGE.--11 years, 572 ft^3/s (16.2 m^3/s), 68.14 in/yr (1,731 mm/yr), 414,400 acre-ft/yr (511 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,600 ft^3/s (159 m^3/s) Dec. 22, gage height, 12.07 ft (3.679 m); minimum, 20 ft^3/s (0.57 m^3/s) Sept. 12, 13.

Period of record: Maximum discharge, 17,200 ft^3/s (487 m^3/s) Jan. 21, 1972, gage height, 21.08 ft (6.425 m); minimum, 16 ft^3/s (0.45 m^3/s) Oct. 1, 1967.

Flood of Dec. 22, 1964, reached a stage of 22.3 ft (6.80 m), from floodmarks, discharge, 19,000 ft^3/s (538 m^3/s), from rating curve extended above 10,000 ft^3/s (283 m^3/s).

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1718: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	41	133	797	597	652	519	177	93	60	30	25
2	32	92	135	745	552	743	510	171	92	59	29	24
3	32	216	159	707	509	652	459	169	90	57	29	24
4	30	531	145	646	468	572	412	183	87	56	29	24
5	30	252	134	611	429	511	382	163	83	57	29	23
6	29	178	130	552	403	495	352	156	80	55	29	24
7	29	198	123	501	377	441	328	153	79	55	29	30
8	28	199	120	460	354	405	308	171	78	54	29	30
9	28	212	112	431	337	383	288	164	79	55	29	26
10	32	358	107	420	358	520	272	161	76	54	29	25
11	37	236	103	816	328	640	256	146	74	53	29	23
12	34	167	100	2,890	318	587	245	137	77	46	29	22
13	32	138	97	4,820	295	583	249	130	83	45	28	21
14	32	114	96	3,170	290	548	229	124	76	44	28	22
15	30	98	124	2,030	276	508	218	118	80	41	27	22
16	30	89	298	1,980	262	522	240	114	111	41	27	22
17	29	82	1,100	2,290	271	548	310	109	161	41	27	21
18	29	129	1,380	1,790	262	605	340	106	122	41	27	24
19	29	432	2,300	1,510	248	1,060	429	103	93	41	26	41
20	29	286	2,360	1,310	237	987	375	102	83	43	26	148
21	30	217	5,280	1,190	228	842	325	101	77	42	26	252
22	30	183	4,850	1,030	220	716	295	97	73	40	26	126
23	30	161	3,200	888	212	628	272	123	76	39	25	255
24	29	144	3,150	1,040	215	564	252	232	74	39	34	287
25	29	133	2,280	1,080	607	513	236	167	87	36	41	260
26	30	220	1,620	920	557	462	220	137	89	34	31	147
27	32	222	2,150	796	518	468	207	123	79	34	28	102
28	50	187	2,000	705	465	462	199	116	67	33	26	81
29	60	164	1,550	634	------	420	190	106	64	32	26	69
30	44	146	1,210	667	------	410	184	100	63	31	26	63
31	37	------	967	667	------	453	------	95	------	30	27	------
TOTAL	1,014	5,825	37,513	38,093	10,193	17,900	9,101	4,254	2,546	1,388	881	2,263
MEAN	32.7	194	1,210	1,229	364	577	303	137	84.9	44.8	28.4	75.4
MAX	60	531	5,280	4,820	607	1,060	519	232	161	60	41	287
MIN	28	41	96	420	212	383	184	95	63	30	25	21
CFSM	.29	1.70	10.6	10.8	3.19	5.06	2.66	1.20	.74	.39	.25	.66
IN.	.33	1.90	12.24	12.43	3.33	5.84	2.97	1.39	.83	.45	.29	.74
AC-FT	2,010	11,550	74,410	75,560	20,220	35,500	18,050	8,440	5,050	2,750	1,750	4,490

CAL YR 1972 TOTAL 226,651 MEAN 619 MAX 11,700 MIN 24 CFSM 5.43 IN 73.96 AC-FT 449,600
WTR YR 1973 TOTAL 130,971 MEAN 359 MAX 5,280 MIN 21 CFSM 3.15 IN 42.74 AC-FT 259,800

PEAK DISCHARGE (BASE, 4,000 CFS).--Dec. 22 (0830) 5,600 cfs (12.07 ft); Jan. 13 (1300) 5,110 cfs (11.52 ft).

14306500 ALSEA RIVER NEAR TIDEWATER, OREG.

LOCATION.--Lat 44°23'10", long 123°49'50", in NW¼NW¼ sec.6, T.14 S., R.9 W., Lincoln County, on right bank 0.9 mi (1.4 km) downstream from Grass Creek, 2.5 mi (4.0 km) upstream from Scott Creek, 3.8 mi (6.1 km) southeast of Tidewater, and at mile 21.0 (33.8 km).

DRAINAGE AREA.--334 mi^2 (865 km^2).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 48.16 ft (14.679 m) above mean sea level. Prior to Nov. 16, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years, 1,543 ft^3/s (43.7 m^3/s), 62.74 in/yr (1,594 mm/yr), 1,118,000 acre-ft/yr (1.38 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,000 ft^3/s (368 m^3/s) Dec. 22, gage height, 14.60 ft (4.450 m); minimum, 58 ft^3/s (1.64 m^3/s) Sept. 5, 12-14.

Period of record: Maximum discharge, 41,800 ft^3/s (1,180 m^3/s) Dec. 22, 1964, gage height, 27.44 ft (8.364 m); minimum, 45 ft^3/s (1.27 m^3/s) Sept. 26, 27, 1965.

Flood on or about Feb. 3, 1890, reached a stage of 29.5 ft (8.99 m), from floodmark shown by old resident (discharge not determined).

REMARKS.--Records excellent. No regulation. Diversion for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	108	351	2,140	1,590	1,570	1,420	595	288	166	77	72
2	90	197	372	1,990	1,470	1,930	1,370	574	282	160	76	68
3	89	376	460	1,880	1,370	1,740	1,250	570	276	153	75	64
4	87	1,160	414	1,710	1,270	1,560	1,140	599	266	150	74	62
5	84	722	376	1,600	1,170	1,400	1,060	558	251	148	74	59
6	80	429	360	1,460	1,100	1,350	975	530	236	145	75	60
7	78	430	335	1,320	1,030	1,220	910	518	230	144	75	73
8	77	443	310	1,220	969	1,120	860	546	225	141	74	79
9	76	442	300	1,140	922	1,050	810	550	219	138	74	75
10	85	383	285	1,090	947	1,380	765	546	211	133	76	68
11	98	623	270	1,780	903	1,660	725	502	203	130	76	63
12	95	426	260	5,960	868	1,540	690	470	197	125	74	59
13	88	340	250	11,800	812	1,540	695	453	216	120	71	58
14	85	289	245	8,130	789	1,470	649	432	208	117	70	59
15	83	247	242	5,190	759	1,370	613	414	214	110	67	61
16	81	221	358	4,870	719	1,350	658	400	253	107	66	60
17	79	205	1,920	5,960	730	1,390	875	386	393	104	66	59
18	78	276	2,750	4,700	737	1,460	1,070	372	358	102	67	62
19	77	973	4,810	4,040	691	2,350	1,460	365	268	103	66	82
20	77	707	5,020	3,430	663	2,440	1,290	358	229	105	64	262
21	80	529	12,000	3,100	636	2,160	1,100	355	207	107	65	567
22	81	454	11,600	2,650	619	1,870	986	345	194	106	62	365
23	81	399	7,780	2,310	599	1,640	915	372	195	105	62	537
24	79	355	8,070	2,480	594	1,490	845	586	194	103	77	635
25	77	340	6,320	2,700	1,460	1,360	790	522	217	100	112	705
26	79	759	4,280	2,320	1,550	1,240	745	432	237	95	100	399
27	83	677	5,330	2,050	1,400	1,260	705	386	210	91	83	270
28	111	530	5,210	1,840	1,260	1,290	671	365	187	87	74	211
29	165	450	4,100	1,660	------	1,170	644	338	174	85	71	178
30	133	392	3,220	1,670	------	1,160	622	315	168	81	69	160
31	106	------	2,570	1,790	------	1,280	------	301	------	78	72	------
TOTAL	2,755	14,382	90,168	95,980	27,627	46,810	27,308	14,055	7,006	3,639	2,284	5,532
MEAN	88.9	479	2,909	3,096	987	1,510	910	453	234	117	73.7	184
MAX	165	1,160	12,000	11,800	1,590	2,440	1,460	599	393	166	112	705
MIN	76	108	242	1,090	594	1,050	613	301	168	78	62	58
CFSM	.27	1.43	8.71	9.27	2.96	4.52	2.72	1.36	.70	.35	.22	.55
IN.	.31	1.60	10.04	10.69	3.08	5.21	3.04	1.57	.78	.41	.25	.62
AC-FT	5,460	28,530	178,800	190,400	54,800	92,850	54,170	27,880	13,900	7,220	4,530	10,970

CAL YR 1972 TOTAL 606,992 MEAN 1,658 MAX 28,500 MIN 64 CFSM 4.96 IN 67.61 AC-FT 1,204,000
WTR YR 1973 TOTAL 337,546 MEAN 925 MAX 12,000 MIN 58 CFSM 2.77 IN 37.59 AC-FT 669,500

PEAK DISCHARGE (BASE, 13,000 CFS).--Dec. 22 (1200) 13,000 cfs (14.60 ft).

ALSEA RIVER BASIN

14306700 NEEDLE BRANCH NEAR SALADO, OREG.

LOCATION.--Lat 44°30'35", long 123°51'20", in SW¼ sec.24, T.12 S., R.10 W., Lincoln County, on right bank 500 ft (152 m) upstream from mouth, 4.6 mi (7.4 km) west of Salado, and 8.5 mi (13.7 km) southeast of Toledo.

DRAINAGE AREA.--0.27 mi² (0.70 km²), computed as 174.64 acres (70.68 hm²) on basis of field survey by Oregon State University.

PERIOD OF RECORD.--October 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 440 ft (134 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 1.64 ft³/s (0.046 m³/s), 82.49 in/yr (2,095 mm/yr), 1,190 acre-ft/yr (1.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 36 ft³/s (1.02 m³/s) Dec. 21, gage height, 2.97 ft (0.905 m); minimum, 0.01 ft³/s (0.0003 m³/s) several days in August and September.

Period of record: Maximum discharge, 64 ft³/s (1.81 m³/s) Jan. 11, 1972, gage height, 3.75 ft (1.143 m); minimum, 0.01 ft³/s (0.0003 m³/s) Sept. 8, 9, 1962, Sept. 18 to Oct, 1965, Aug. 17, Sept. 14, 23-28, 1967, many days in August and September 1970, Aug. 26, 1971, many days in August and September 1972, several days in August and September 1973.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1718: 1959. WSP 1935: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.21	.81	2.3	.96	1.9	1.3	.52	.19	.12	.04	.02
2	.03	.27	1.0	2.0	.92	2.4	1.3	.49	.20	.12	.03	.02
3	.03	.96	.88	1.9	.84	2.2	1.2	.49	.19	.12	.03	.01
4	.03	2.0	.84	1.8	.78	1.8	1.0	.47	.16	.12	.04	.01
5	.02	.96	.84	1.8	.71	1.5	.92	.42	.16	.10	.04	.01
6	.02	.68	.78	1.6	.68	1.5	.81	.40	.16	.09	.04	.03
7	.03	.63	.71	1.5	.63	1.4	.74	.38	.16	.09	.04	.08
8	.05	.63	.58	1.3	.57	1.3	.71	.44	.17	.08	.04	.04
9	.05	.84	.66	1.2	.54	1.2	.65	.47	.16	.08	.04	.02
10	.05	1.1	.63	1.1	.54	3.2	.60	.40	.14	.08	.04	.01
11	.05	.88	.61	1.4	.49	3.2	.54	.34	.13	.08	.04	.02
12	.04	.71	.65	6.7	.49	2.8	.54	.32	.14	.08	.03	.02
13	.04	.63	.60	14	.44	2.4	.52	.31	.13	.07	.04	.01
14	.03	.54	.57	7.9	.44	2.3	.47	.29	.17	.05	.04	.02
15	.03	.49	.57	5.0	.40	2.1	.44	.29	.16	.04	.03	.02
16	.03	.44	.71	4.9	.40	2.2	.65	.27	.38	.04	.03	.01
17	.03	.40	2.4	5.9	.47	2.4	.57	.27	.36	.04	.03	.02
18	.02	.57	3.7	5.0	.40	2.8	1.2	.26	.22	.06	.02	.02
19	.03	.63	6.2	5.0	.38	5.0	1.5	.26	.17	.06	.03	.06
20	.03	.60	11	4.4	.38	4.2	1.4	.26	.13	.06	.03	.24
21	.04	.60	25	3.6	.36	3.1	1.2	.24	.12	.06	.02	.19
22	.03	.54	19	3.0	.36	2.3	1.0	.24	.13	.05	.02	.17
23	.03	.54	12	2.3	.34	1.8	.88	.32	.13	.04	.03	.27
24	.02	.52	12	2.3	.40	1.4	.81	.40	.16	.04	.16	.40
25	.05	.71	7.6	2.0	1.6	1.2	.74	.27	.31	.04	.06	.21
26	.07	2.2	8.5	1.9	1.5	.96	.71	.24	.21	.04	.04	.10
27	.04	1.8	19	1.6	1.2	.92	.68	.22	.16	.04	.03	.08
28	.24	1.4	11	1.4	1.1	.81	.63	.21	.14	.04	.03	.05
29	.10	1.1	6.2	1.2	------	.74	.60	.20	.14	.04	.03	.06
30	.06	.92	4.1	1.2	------	.81	.54	.20	.14	.04	.04	.05
31	.05	------	2.4	1.0	------	.92	------	.19	------	.04	.03	------
TOTAL	1.41	24.50	162.14	98.2	18.32	62.76	24.85	10.08	5.32	2.05	1.19	2.28
MEAN	.046	.82	5.23	3.17	.65	2.02	.83	.33	.18	.066	.038	.076
MAX	.24	2.2	25	14	1.6	5.0	1.5	.52	.38	.12	.16	.40
MIN	.02	.21	.57	1.0	.34	.74	.44	.19	.12	.04	.02	.01
CFSM	.17	3.04	19.4	11.7	2.41	7.48	3.07	1.22	.67	.24	.14	.28
IN.	.19	3.38	22.34	13.53	2.52	8.65	3.42	1.39	.73	.28	.16	.31
AC-FT	2.8	49	322	195	36	124	49	20	11	4.1	2.4	4.5

CAL YR 1972 TOTAL 700.62 MEAN 1.91 MAX 46 MIN .01 CFSM 7.07 IN 96.53 AC-FT 1.390
WTR YR 1973 TOTAL 413.10 MEAN 1.13 MAX 25 MIN .01 CFSM 4.19 IN 56.92 AC-FT 819

PEAK DISCHARGE (BASE, 15 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-21	0145	2.97	36	1-13	0415	2.42	16
12-27	0715	2.59	22				

14306800 FLYNN CREEK NEAR SALADO, OREG.

LOCATION.--Lat 44°32'20", long 123°51'05", in SW¼ sec.12, T.12 S., R.10 W., Lincoln County, on right bank 1,000 ft (300 m) upstream from mouth, 3.4 mi (5.5 km) west of Salado, and 6.9 mi (11.1 km) southeast of Toledo.

DRAINAGE AREA.--0.78 mi^2 (2.02 km^2), computed as 501.96 acres (203 hm^2) on basis of field survey by Oregon State University.

PERIOD OF RECORD.--September 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 685 ft (209 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 4.37 ft^3/s (0.124 m^3/s), 76.08 in/yr (1,932 mm/yr), 3,170 acre-ft/yr 3.91 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 56 ft^3/s (1.59 m^3/s) Dec. 21, gage height, 4.02 ft (1.225 m); minimum, 0.11 ft^3/s (0.003 m^3/s) Oct. 19, 24, 25.

Period of record: Maximum discharge, 139 ft^3/s (3.94 m^3/s) Jan. 11, 1972, gage height, 4.73 ft (1.442 m); minimum, 0.07 ft^3/s (0.002 m^3/s) Sept. 27, 1967.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.35	1.1	8.0	3.3	2.8	3.3	1.6	.65	.79	.27	.17
2	.15	.52	1.4	7.0	3.1	3.0	3.2	1.5	.65	.73	.26	.16
3	.15	1.7	1.3	6.4	2.9	3.1	3.1	1.4	.64	.70	.25	.15
4	.15	2.8	1.2	5.7	2.7	3.1	2.9	1.4	.61	.70	.25	.15
5	.14	1.1	1.2	5.3	2.5	3.0	2.8	1.2	.58	.67	.24	.15
6	.13	.87	1.2	4.7	2.4	2.9	2.6	1.2	.55	.64	.23	.20
7	.13	1.2	1.0	4.2	2.2	2.7	2.5	1.2	.54	.61	.24	.24
8	.13	1.2	.96	3.9	2.1	2.6	2.3	1.3	.54	.61	.23	.17
9	.14	1.3	.91	3.6	2.1	2.6	2.2	1.3	.52	.58	.22	.16
10	.15	1.2	.87	3.4	2.0	5.5	2.1	1.2	.49	.56	.22	.15
11	.15	1.1	.85	4.0	1.9	5.4	2.0	1.1	.46	.53	.21	.14
12	.14	.87	.93	12	1.9	5.2	1.9	1.0	.49	.51	.21	.14
13	.13	.77	.80	26	1.7	5.3	1.8	.98	.50	.49	.21	.14
14	.13	.66	.78	22	1.7	5.1	1.7	.94	.61	.46	.20	.15
15	.12	.60	.77	15	1.6	4.8	1.6	.90	.62	.44	.20	.14
16	.12	.55	1.1	13	1.5	5.1	2.0	.86	1.2	.42	.20	.14
17	.12	.50	3.3	14	1.6	5.1	1.9	.81	1.7	.42	.19	.14
18	.12	.79	4.2	13	1.5	5.8	2.5	.78	1.1	.40	.19	.15
19	.12	.84	11	13	1.4	8.8	2.7	.75	.89	.41	.19	.23
20	.12	.69	17	12	1.4	9.0	2.7	.74	.79	.40	.18	.80
21	.14	.74	43	11	1.3	7.7	2.5	.70	.72	.39	.18	.70
22	.13	.68	37	9.2	1.3	6.4	2.4	.68	.68	.37	.18	.59
23	.12	.71	28	7.9	1.2	5.2	2.3	1.0	.67	.36	.19	.79
24	.12	.65	27	7.4	1.3	4.5	2.2	1.5	.82	.34	.43	1.1
25	.13	.90	21	6.3	2.5	3.9	2.2	1.3	1.3	.33	.23	.68
26	.18	2.0	23	5.5	2.0	3.5	2.0	1.1	1.1	.32	.19	.44
27	.16	1.6	37	5.0	1.9	3.3	2.0	.96	1.0	.31	.18	.35
28	.47	1.4	28	4.5	2.0	3.1	1.9	.86	.95	.30	.18	.31
29	.24	1.3	19	4.1	------	2.8	1.8	.78	.89	.29	.18	.27
30	.18	1.1	14	4.2	------	2.8	1.7	.71	.84	.28	.18	.23
31	.16	------	10	3.7	------	3.0	------	.67	------	.28	.17	------
TOTAL	4.73	30.69	338.87	265.0	55.0	137.1	68.8	32.42	23.10	14.64	6.68	9.33
MEAN	.15	1.02	10.9	8.55	1.96	4.42	2.29	1.05	.77	.47	.22	.31
MAX	.47	2.8	43	26	3.3	9.0	3.3	1.6	1.7	.79	.43	1.1
MIN	.12	.35	.77	3.4	1.2	2.6	1.6	.67	.46	.28	.17	.14
CFSM	.19	1.31	14.0	11.0	2.51	5.67	2.94	1.35	.99	.60	.28	.40
IN.	.23	1.46	16.16	12.64	2.62	6.54	3.28	1.55	1.10	.70	.32	.44
AC-FT	9.4	61	672	526	109	272	136	64	46	29	13	19

CAL YR 1972 TOTAL 1,848.99 MEAN 5.05 MAX 43 MIN .12 CFSM 6.47 IN 88.18 AC-FT 3,670
WTR YR 1973 TOTAL 986.36 MEAN 2.70 MAX 43 MIN .12 CFSM 3.46 IN 47.04 AC-FT 1,960

PEAK DISCHARGE (BASE, 40 CFS).--Dec. 21 (0145) 56 cfs (4.02 ft); Dec. 27 (1130) 42 cfs (3.83 ft).

14306810 DEER CREEK NEAR SALADO. OREG.

LOCATION.--Lat 44°32'05", long 123°52'35", in SW¼ sec.11, T.12 S., R.10 W., Lincoln County, Siuslaw National Forest, on right bank 1,000 ft (300 m) upstream from mouth, 4.6 mi (7.4 km) west of Salado, and 6.5 mi (10.5 km) southeast of Toledo.

DRAINAGE AREA.--1.17 mi^2 (3.03 km^2) computed as 749.5 acres (303.3 hm^2) on basis of field survey by Oregon State University.

PERIOD OF RECORD.--September 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 600 ft (183 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 6.49 ft^3/s (0.18 m^3/s), 75.33 in/yr (1,913 mm/yr), 4,700 acre-ft/yr (5.80 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 115 ft^3/s (3.26 m^3/s) Dec. 21, gage height, 3.63 ft (1.106 m); minimum, 0.18 ft^3/s (0.005 m^3/s) on several days in September.
Period of record: Maximum discharge, 201 ft^3/s (5.69 m^3/s) Jan. 28, 1965, gage height, 4.21 ft (1.283 m); maximum gage height, 4.39 ft (1.338 m) Jan. 20, 1972 (backwater from log); minimum discharge, 0.15 ft^3/s (0.004 m^3/s) Sept. 2, 14-16, 1972.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1718: 1959. WSP 1935: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.60	2.3	11	4.9	5.4	4.9	2.0	1.1	1.8	.43	.25
2	.36	.85	3.0	9.6	4.6	6.2	5.1	1.9	1.1	1.6	.41	.23
3	.35	2.7	3.3	9.1	4.3	6.5	4.8	1.9	1.1	1.5	.41	.23
4	.33	5.7	3.1	8.7	3.9	6.0	4.4	1.9	.98	1.4	.41	.21
5	.31	3.2	2.9	8.4	3.6	5.3	3.9	1.6	.94	1.3	.41	.21
6	.29	2.6	2.6	7.3	3.4	4.9	3.6	1.6	.87	1.2	.39	.31
7	.28	3.1	2.3	6.5	3.2	4.3	3.4	1.5	.87	1.1	.39	.39
8	.27	3.2	2.0	5.7	3.1	3.9	3.1	1.8	.90	1.1	.39	.29
9	.29	3.3	1.9	5.2	2.9	3.8	2.9	2.0	.84	.98	.39	.25
10	.33	3.3	1.9	4.8	2.9	11	2.7	1.7	.78	.94	.37	.23
11	.33	2.8	1.7	6.9	2.7	11	2.6	1.5	.75	.87	.37	.21
12	.30	2.4	1.7	23	2.6	9.6	2.4	1.4	.84	.84	.37	.21
13	.29	2.0	1.5	47	2.4	9.0	2.3	1.3	.78	.81	.37	.21
14	.27	1.7	1.4	30	2.4	8.4	2.2	1.3	.90	.75	.35	.23
15	.26	1.5	1.4	18	2.2	7.8	2.1	1.2	.94	.72	.35	.21
16	.25	1.3	2.1	16	2.1	8.2	2.8	1.2	2.0	.72	.35	.19
17	.25	1.2	7.1	18	2.4	8.4	2.6	1.1	3.5	.69	.33	.21
18	.25	1.7	10	17	2.2	9.3	3.5	1.1	2.7	.69	.31	.21
19	.26	1.9	21	17	2.0	14	3.9	1.1	2.2	.69	.31	.35
20	.26	1.7	30	16	1.9	14	3.9	1.0	1.9	.69	.29	1.3
21	.30	1.7	81	14	1.8	11	3.7	.98	1.6	.66	.27	1.2
22	.28	1.6	58	12	1.7	8.8	3.6	.94	1.5	.63	.27	1.0
23	.27	1.6	40	11	1.7	7.3	3.4	1.6	1.4	.60	.31	1.4
24	.25	1.5	38	11	1.9	6.0	3.1	2.7	1.6	.57	.69	2.1
25	.28	1.9	26	8.3	4.1	5.2	2.9	2.0	2.9	.54	.43	1.6
26	.33	5.0	35	8.5	3.6	4.6	2.7	1.7	2.9	.45	.35	1.1
27	.33	4.2	56	7.8	3.5	4.4	2.5	1.6	2.8	.51	.31	.81
28	.78	3.6	37	6.9	3.5	4.1	2.3	1.5	2.6	.48	.27	.69
29	.58	3.1	24	6.0	------	3.7	2.2	1.4	2.3	.45	.27	.60
30	.43	2.6	17	6.2	------	3.8	2.1	1.3	2.1	.45	.29	.54
31	.38	------	13	5.5	------	4.3	------	1.2	------	.43	.27	------
TOTAL	10.12	73.55	528.2	382.4	81.5	220.2	95.6	47.02	47.69	26.16	11.13	16.97
MEAN	.33	2.45	17.0	12.3	2.91	7.10	3.19	1.52	1.59	.84	.36	.57
MAX	.78	5.7	81	47	4.9	14	5.1	2.7	3.5	1.8	.69	2.1
MIN	.25	.60	1.4	4.8	1.7	3.7	2.1	.94	.75	.43	.27	.19
CFSM	.28	2.09	14.5	10.5	2.49	6.07	2.73	1.30	1.36	.72	.31	.49
IN.	.32	2.34	16.79	12.16	2.59	7.00	3.04	1.49	1.52	.83	.35	.54
AC-FT	20	146	1,050	758	162	437	190	93	95	52	22	34

CAL YR 1972 TOTAL 2,793.49 MEAN 7.63 MAX 131 MIN .18 CFSM 6.52 IN 88.82 AC-FT 5,540
WTR YR 1973 TOTAL 1,540.54 MEAN 4.22 MAX 81 MIN .19 CFSM 3.61 IN 48.98 AC-FT 3,060

PEAK DISCHARGE (BASE, 60 CFS).--Dec. 21 (0230) 115 cfs (3.63 ft); Dec. 27 (0715) 60 cfs (3.18 ft).

14306900 BIG CREEK NEAR ROOSEVELT BEACH, OREG.

LOCATION.--Lat 44°10'05", long 124°03'55", in SE¼SE¼ sec.13, T.16 S., R.12 W., Lane County, on right bank 1.0 mi (1.6 km) downstream from Frying Pan Creek, 2.5 mi (4.0 km) east of Roosevelt Beach.

DRAINAGE AREA.--11.9 mi^2 (30.8 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 141 ft (43.0 m) above mean sea level (by barometer).

EXTREMES.--Current year: Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Dec. 21, gage height, 5.98 ft (1.823 m); minimum, 4.5 ft^3/s (0.13 m^3/s) Oct. 18-21, 24, 25.

Flood in January 1972 reached a stage of 6.56 ft (1.999 m), from floodmark, discharge, 1,580 ft^3/s (44.7 m^3/s).

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	14	38	157	83	110	94	38	34	44	14	8.0
2	5.5	20	50	144	77	108	87	37	33	41	14	7.7
3	5.0	64	42	130	73	111	81	38	32	40	13	7.3
4	4.8	104	38	113	69	109	77	43	30	38	12	7.2
5	4.8	39	36	105	64	101	72	35	29	36	12	7.0
6	4.6	38	34	94	60	100	67	35	28	34	12	11
7	4.6	39	30	84	57	89	63	33	27	32	12	12
8	4.6	33	30	77	53	81	59	50	25	31	12	8.7
9	4.6	42	28	74	51	86	55	41	25	30	12	7.9
10	5.5	41	28	72	58	221	52	38	24	28	12	7.2
11	6.5	32	26	112	51	210	49	35	23	27	11	7.0
12	6.0	28	31	299	49	187	47	32	31	25	11	7.1
13	5.5	26	27	634	46	173	45	30	26	24	11	7.0
14	5.5	23	26	521	46	148	42	29	27	23	10	7.1
15	5.0	21	25	361	43	130	40	28	26	23	10	7.2
16	5.0	20	75	331	42	141	70	27	58	22	10	6.8
17	4.8	19	317	329	44	130	61	26	54	22	9.9	7.5
18	4.6	35	318	287	41	151	83	25	42	21	9.3	11
19	4.5	58	330	234	39	201	81	25	36	21	9.1	27
20	4.5	38	465	207	37	189	72	24	33	21	9.0	72
21	5.9	37	953	178	36	174	67	24	30	20	8.7	89
22	5.5	33	775	155	35	150	63	24	29	20	8.7	46
23	5.0	32	633	136	33	131	59	51	29	19	9.1	78
24	4.7	29	639	153	39	119	55	103	33	18	23	104
25	4.6	35	466	133	105	106	52	61	98	17	14	76
26	5.0	95	372	120	80	94	49	52	86	16	11	55
27	5.2	62	547	112	75	90	47	48	68	16	9.9	44
28	14	54	439	102	77	83	44	44	57	15	9.2	37
29	10	47	317	94	------	76	42	40	51	15	8.7	32
30	7.4	42	242	104	------	89	40	38	47	15	8.6	29
31	6.5	------	190	94	------	91	------	36	------	14	8.5	------
TOTAL	175.2	1,200	7,567	5,746	1,563	3,979	1,815	1,190	1,171	768	344.7	833.7
MEAN	5.65	40.0	244	185	55.8	128	60.5	38.4	39.0	24.8	11.1	27.8
MAX	14	104	953	634	105	221	94	103	98	44	23	104
MIN	4.5	14	25	72	33	76	40	24	23	14	8.5	6.8
CFSM	.47	3.36	20.5	15.5	4.69	10.8	5.08	3.23	3.28	2.08	.93	2.34
IN.	.55	3.75	23.65	17.96	4.89	12.44	5.67	3.72	3.66	2.40	1.08	2.61
AC-FT	348	2,380	15,010	11,400	3,100	7,890	3,600	2,360	2,320	1,520	684	1,650

WTR YR 1973 TOTAL 26,352.6 MEAN 72.2 MAX 953 MIN 4.5 CFSM 6.07 IN 82.38 AC-FT 52,270

PEAK DISCHARGE (BASE, 800 CFS).--Dec. 21 (1030) 1,020 cfs (5.98 ft).

14307580 LAKE CREEK NEAR DEADWOOD, OREG.

LOCATION.--Lat 44°04'58", long 123°47'05", in NW¼NW¼ sec.21, T.17 S., R.9 W., Lane County, on right bank 0.2 mi (0.3 km) upstream from Indian Creek, 1.5 mi (2.4 km) southwest of Deadwood, and at mile 2.6 (4.2 km).

DRAINAGE AREA.--174 mi² (451 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 178.86 ft (54.517 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 756 ft³/s (21.4 m³/s), 59.00 in/yr (1,499 mm/yr), 547,700 acre-ft/yr (675 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,770 ft³/s (192 m³/s) Dec. 21, gage height, 8.05 ft (2.454 m); minimum, 16 ft³/s (0.45 m³/s) Aug. 23.
Period of record: Maximum discharge, 19,700 ft³/s (558 m³/s) Jan. 21, 1972, gage height, 15.25 ft (4.648 m); minimum, 16 ft³/s (0.45 m³/s) Aug. 23, 1973.

REMARKS.--Records good. Flow slightly regulated by natural storage in Triangle Lake. Several diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	63	175	922	804	756	1.070	248	115	79	26	25
2	46	125	198	831	750	992	908	240	110	77	25	23
3	44	222	264	768	696	922	774	236	110	73	25	23
4	43	450	236	702	636	817	678	256	106	71	24	20
5	41	320	211	660	576	732	600	233	101	67	24	20
6	39	233	204	600	545	696	540	222	99	65	23	19
7	37	226	175	545	510	624	495	218	94	65	23	35
8	35	229	140	505	475	560	455	226	90	63	23	37
9	35	229	140	480	450	520	425	226	90	63	21	29
10	44	350	140	465	445	714	395	218	88	60	21	25
11	48	272	140	804	420	810	375	204	84	58	21	23
12	44	211	160	2.690	415	768	355	194	86	54	21	21
13	43	175	149	5.070	390	780	355	185	88	52	20	21
14	43	152	133	3.850	380	744	330	175	88	50	21	23
15	41	133	127	2.660	365	678	312	166	92	48	20	24
16	39	120	191	2.400	345	672	345	160	110	46	19	24
17	37	110	1.580	2.510	350	708	425	155	163	44	20	23
18	37	127	1.600	2.080	345	714	495	146	146	44	20	27
19	35	350	2.660	1.820	330	985	618	143	122	43	20	44
20	35	304	2.780	1.570	316	1.120	560	140	108	44	19	99
21	37	268	5.480	1.460	304	1.030	495	135	96	46	18	155
22	37	240	5.380	1.270	296	929	445	127	90	44	18	117
23	37	215	3.950	1.100	284	824	405	146	90	42	17	138
24	35	191	4.090	1.210	284	744	370	201	86	40	25	260
25	35	178	3.250	1.310	666	666	345	182	101	38	44	252
26	35	284	2.110	1.150	714	594	320	166	112	36	33	163
27	37	284	2.630	999	696	588	304	152	99	34	29	122
28	52	248	2.480	894	636	576	288	143	90	32	25	101
29	73	218	1.850	810	------	540	272	135	88	30	25	96
30	58	194	1.400	824	------	550	260	125	84	28	25	77
31	54	------	1.110	866	------	780	------	120	------	28	28	------
TOTAL	1.304	6.721	45.133	43.825	13.423	23.133	14.014	5.623	3.026	1.564	723	2.056
MEAN	42.1	224	1.456	1.414	479	746	467	181	101	50.5	23.3	68.5
MAX	73	450	5.480	5.070	804	1.120	1.070	256	163	79	44	260
MIN	35	63	127	465	284	520	260	120	84	28	17	19
CFSM	.24	1.29	8.37	8.13	2.75	4.29	2.68	1.04	.58	.29	.13	.39
IN.	.28	1.44	9.65	9.37	2.87	4.95	3.00	1.20	.65	.33	.15	.44
AC-FT	2.590	13.330	89.520	86.930	26.620	45.880	27.800	11.150	6.000	3.100	1.430	4.080

CAL YR 1972 TOTAL 322.316 MEAN 881 MAX 14.500 MIN 19 CFSM 5.06 IN 68.91 AC-FT 639.300
WTR YR 1973 TOTAL 160.545 MEAN 440 MAX 5.480 MIN 17 CFSM 2.53 IN 34.32 AC-FT 318.400

PEAK DISCHARGE (BASE, 4,200 CFS).--Dec. 21 (0130) 6,770 cfs (8.05 ft); Jan. 13 (1500) 5,300 cfs (7.00 ft).

14307620 SIUSLAW RIVER NEAR MAPLETON, OREG.

LOCATION.--Lat 44°03'45", long 123°52'55, in SW¼NW¼ sec.27, T.17 S., R.10 W., Lane County, on right bank 250 ft (76 m) above Shoemaker Creek, 2.5 mi (4.0 km) northwest of Mapleton, and at mile 23.7 (38.1 km).

DRAINAGE AREA.--588 mi^2 (1,523 km^2).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 41 ft (12.5 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 2,271 ft^3/s (64.3 m^3/s), 52.45 in/yr (1,332 mm/yr). 1,645,000 acre-ft/yr (2.03 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,000 ft^3/s (481 m^3/s) Dec. 22, gage height, 15.63 ft (4.764 m); minimum, 56 ft^3/s (1.59 m^3/s) Aug. 22-24.

Period of record: Maximum discharge, 49,400 ft^3/s (1,400 m^3/s) Jan. 21, 1972, gage height, 28.45 ft (8.672 m); minimum, 56 ft^3/s (1.59 m^3/s) Aug. 22-24, 1973.

Flood of December 1964 reached a stage of about 28 ft (8.5 m), from information by local residents (discharge not determined).

REMARKS.--Records good. No regulation or diversions above station. Records of water temperatures and suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	191	525	2,660	2,350	2,150	3,120	788	370	233	91	81
2	151	313	550	2,370	2,170	3,100	2,810	770	355	219	89	74
3	141	530	716	2,200	2,000	2,860	2,340	752	355	209	85	70
4	133	1,150	764	2,040	1,860	2,440	2,000	800	340	200	81	65
5	106	970	680	1,910	1,730	2,170	1,810	758	326	197	79	61
6	104	668	656	1,760	1,640	2,050	1,640	722	307	190	78	61
7	100	625	555	1,600	1,530	1,890	1,510	705	297	187	74	89
8	95	640	460	1,470	1,440	1,730	1,410	728	284	181	74	105
9	95	625	460	1,400	1,370	1,600	1,340	728	280	179	74	96
10	106	1,030	460	1,350	1,350	2,100	1,260	699	272	176	74	83
11	158	865	460	2,040	1,300	2,540	1,180	655	263	167	74	72
12	161	630	470	7,080	1,290	2,370	1,130	622	263	162	74	65
13	158	530	415	14,900	1,250	2,280	1,130	595	284	156	74	63
14	158	450	380	11,600	1,210	2,120	1,080	567	280	151	74	65
15	158	384	356	7,290	1,170	1,930	1,010	540	284	143	72	66
16	156	344	480	6,440	1,120	1,890	1,080	520	340	138	68	70
17	141	316	4,510	7,350	1,120	1,980	1,280	500	520	133	66	68
18	141	328	5,700	6,180	1,110	2,030	1,570	475	510	131	66	74
19	133	794	8,130	5,390	1,060	2,700	1,960	460	405	131	66	111
20	117	942	7,670	4,690	1,030	3,370	1,840	445	345	131	65	268
21	104	770	14,900	4,310	998	3,230	1,570	435	307	136	61	530
22	104	710	15,100	3,760	970	2,850	1,390	435	276	136	58	410
23	104	620	11,000	3,190	942	2,410	1,270	455	272	136	56	480
24	104	555	11,300	3,330	935	2,240	1,160	666	263	131	74	824
25	100	520	9,270	3,930	1,720	2,060	1,080	600	311	128	121	893
26	100	935	6,000	3,470	2,040	1,870	1,020	535	375	121	114	567
27	100	1,010	7,370	2,940	2,070	1,790	963	500	326	114	100	410
28	156	812	7,550	2,570	1,940	1,750	907	480	289	111	91	316
29	209	680	5,560	2,320	------	1,630	865	440	263	105	83	255
30	206	590	4,190	2,270	------	1,610	824	410	244	100	79	219
31	188	------	3,260	2,460	------	2,080	------	385	------	96	81	------
TOTAL	4,145	19,527	129,897	126,270	40,715	68,820	43,549	18,170	9,606	4,728	2,416	6,611
MEAN	134	651	4,190	4,073	1,454	2,220	1,452	586	320	153	77.9	220
MAX	209	1,150	15,100	14,900	2,350	3,370	3,120	800	520	233	121	893
MIN	95	191	356	1,350	935	1,600	824	385	244	96	56	61
CFSM	.23	1.11	7.13	6.93	2.47	3.78	2.47	1.00	.54	.26	.13	.37
IN.	.26	1.24	8.22	7.99	2.58	4.35	2.76	1.15	.61	.30	.15	.42
AC-FT	8,220	38,730	257,700	250,500	80,760	136,500	86,380	36,040	19,050	9,380	4,790	13,110

CAL YR 1972 TOTAL 916,982 MEAN 2,505 MAX 41,900 MIN 74 CFSM 4.26 IN 58.01 AC-FT 1,819,000
WTR YR 1973 TOTAL 474,454 MEAN 1,300 MAX 15,100 MIN 56 CFSM 2.21 IN 30.02 AC-FT 941,100

PEAK DISCHARGE (BASE, 15,000 CFS).--Dec. 22 (1330) 17,000 cfs (15.63 ft); Jan. 13 (1830) 15,900 cfs (15.11 ft).

14307645 NORTH FORK SIUSLAW RIVER NEAR MINERVA, OREG.

LOCATION.--Lat 44°02'50", long 124°00'10", in NW¼SW¼ sec.34, T.17 S., R.11 W., Lane County, on left bank 10 ft (3 m) downstream from county road bridge, 0.3 mi (0.5 km) upstream from Condon Creek, 2.7 mi (4.3 km) southwest of Minerva, and at mile 13.09 (21.06 km).

DRAINAGE AREA.--41.2 mi^2 (106.7 km^2).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 40 ft (12 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 292 ft^3/s (8.27 m^3/s), 96.25 in/yr (2,445 mm/yr), 211,600 acre-ft/yr (261 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,390 ft^3/s (67.7 m^3/s) Dec. 21, gage height, 19.98 ft (6.090 m); minimum, 13 ft^3/s (0.37 m^3/s) Oct. 25.
Period of record: Maximum discharge, 3,040 ft^3/s (86.1 m^3/s) Jan. 21, 1972, gage height, 23.01 ft (7.013 m); minimum, 12 ft^3/s (0.34 m^3/s) Sept. 2, 3, 15-18, 1972.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	23	94	381	245	288	321	97	63	79	26	19
2	15	56	133	369	231	344	275	93	61	72	25	18
3	15	113	138	360	220	295	244	95	60	66	24	17
4	14	229	117	328	211	280	220	107	57	63	24	17
5	14	109	108	306	199	255	203	91	55	60	24	17
6	14	77	103	275	188	249	187	88	52	57	24	21
7	14	77	89	251	179	225	174	88	52	55	24	32
8	13	80	85	232	168	208	162	115	51	52	24	23
9	14	78	80	220	161	211	152	107	50	52	24	21
10	15	82	80	214	168	683	143	97	48	48	24	19
11	16	69	78	312	158	628	135	90	46	47	23	18
12	16	57	82	973	154	487	129	84	58	45	22	18
13	15	52	72	1,880	146	421	127	80	56	42	22	17
14	15	47	64	1,550	147	359	119	76	54	41	22	18
15	15	42	61	959	141	311	113	72	54	39	21	18
16	14	40	141	915	135	325	159	70	100	38	21	17
17	14	37	1,080	1,010	144	322	167	67	122	37	21	17
18	14	53	1,140	809	138	316	230	64	94	37	21	23
19	14	141	1,040	684	131	528	256	63	76	36	20	41
20	14	100	1,160	594	127	472	211	60	66	37	20	103
21	14	85	2,280	538	122	401	186	59	60	37	19	241
22	15	75	1,950	454	118	339	167	57	57	36	19	114
23	15	69	1,530	392	114	295	155	86	58	35	19	207
24	14	63	1,710	437	115	266	143	154	55	33	41	334
25	13	71	1,360	410	275	243	133	114	147	32	38	230
26	14	364	876	357	238	223	125	93	227	30	25	140
27	14	289	1,680	319	223	221	118	85	150	29	23	102
28	24	155	1,340	287	203	214	111	81	115	28	21	82
29	30	125	836	267	------	197	106	74	97	27	20	70
30	22	106	619	278	------	236	102	69	86	27	20	61
31	19	------	469	269	------	286	------	65	------	27	19	------
TOTAL	485	2,884	20,595	16,630	4,799	10,128	5,073	2,641	2,327	1,344	720	2,075
MEAN	15.6	96.1	664	536	171	327	169	85.2	77.6	43.4	23.2	69.2
MAX	30	364	2,280	1,880	275	683	321	154	227	79	41	334
MIN	13	23	61	214	114	197	102	57	46	27	19	17
CFSM	.38	2.33	16.1	13.0	4.15	7.94	4.10	2.07	1.88	1.05	.56	1.68
IN.	.44	2.60	18.60	15.02	4.33	9.14	4.58	2.38	2.10	1.21	.65	1.87
AC-FT	962	5,720	40,850	32,990	9,520	20,090	10,060	5,240	4,620	2,670	1,430	4,120

CAL YR 1972 TOTAL 113,347 MEAN 310 MAX 2,810 MIN 12 CFSM 7.52 IN 102.34 AC-FT 224,800
WTR YR 1973 TOTAL 69,781 MEAN 191 MAX 2,280 MIN 13 CFSM 4.64 IN 62.93 AC-FT 138,300

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT	DISCHARGE
12-21	0530	19.98	2,390	1-13	1930	18.25	2,050
12-27	1600	17.66	1,930				

14307700 JACKSON CREEK NEAR TILLER, OREG.

LOCATION.--Lat 42°57'15", long 122°49'40", in SW¼NE¼ sec.21, T.30 S., R.1 W., Douglas County, on right bank 0.5 mi (0.8 km) upstream from Chapman Creek, 0.8 mi (1.3 km) downstream from Beaver Creek, 6.5 mi (10.5 km) northeast of Tiller, and at mile 3.0 (4.8 km). Records include flow of Chapman Creek.

DRAINAGE AREA.--152 mi² (394 km²), at cableway 0.6 mi (1.0 km) downstream where all discharge measurements are made.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,240.25 ft (378.028 m) above mean sea level (levels by Douglas County Water Resources Survey).

AVERAGE DISCHARGE.--18 years, 315 ft³/s (8.92 m³/s), 28.14 in/yr (715 mm/yr), 228,200 acre-ft/yr (281 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,520 ft³/s (43.0 m³/s) Jan. 16, gage height, 5.04 ft (1.536 m); minimum, 13 ft³/s (0.37 m³/s) Sept. 14, 15, 17.

Period of record: Maximum discharge, 21,100 ft³/s (598 m³/s) Dec. 22, 1964, gage height, 18.0 ft (5.49 m), from floodmark, from rating curve extended above 5,100 ft³/s (144 m³/s) and basin runoff comparison; minimum daily, 12 ft³/s (0.34 m³/s) Oct. 2-4, 1955.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1935: 1956-57(M)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	35	73	219	282	290	485	280	79	34	17	15
2	24	50	66	220	258	287	420	267	75	33	17	15
3	24	47	104	211	246	267	371	270	71	32	17	15
4	24	110	95	182	247	254	349	283	67	31	17	15
5	23	137	76	164	352	245	375	254	63	30	17	15
6	23	79	73	148	420	228	382	239	59	29	17	14
7	23	66	62	126	364	203	335	228	56	29	17	15
8	23	81	46	127	328	188	297	228	54	28	16	17
9	24	75	44	119	307	177	283	225	52	28	16	16
10	38	86	44	127	354	360	283	216	52	27	16	15
11	100	68	42	232	351	468	287	206	50	26	16	15
12	76	56	42	824	339	379	300	214	49	26	16	14
13	50	50	44	1,070	300	349	464	242	49	26	16	14
14	40	50	50	837	277	318	420	267	46	25	15	13
15	39	45	53	645	283	283	356	270	50	24	15	14
16	35	43	79	1,230	255	280	356	248	51	23	15	14
17	31	41	319	962	245	290	548	231	95	23	15	13
18	29	39	518	733	228	287	624	211	85	22	15	14
19	28	51	698	615	207	413	716	182	65	22	15	16
20	27	75	599	489	185	489	660	158	57	23	15	22
21	27	66	654	421	170	468	588	141	51	23	15	22
22	26	78	1,170	376	160	452	579	127	49	22	15	22
23	25	67	877	327	150	394	570	119	52	22	15	39
24	25	58	921	304	148	356	509	134	46	21	16	65
25	24	54	625	403	175	353	464	143	44	21	28	90
26	24	132	445	349	194	339	456	119	43	20	22	42
27	24	165	394	299	256	300	460	106	40	20	18	29
28	29	115	426	277	240	277	420	100	38	19	17	24
29	35	96	347	295	------	248	360	92	36	19	17	22
30	31	83	282	307	------	349	311	89	35	18	16	20
31	29	------	257	323	------	561	------	86	------	18	16	------
TOTAL	1,004	2,198	9,524	12,961	7,321	10,152	13,028	5,975	1,659	764	515	676
MEAN	32.4	73.3	307	418	261	327	434	193	55.3	24.6	16.6	22.5
MAX	100	165	1,170	1,230	420	561	716	283	95	34	28	90
MIN	23	35	42	119	148	177	283	86	35	18	15	13
AC-FT	1,990	4,360	18,890	25,710	14,520	20,140	25,840	11,850	3,290	1,520	1,020	1,340

CAL YR 1972 TOTAL 143,222 MEAN 391 MAX 7,830 MIN 23 AC-FT 284,100
WTR YR 1973 TOTAL 65,777 MEAN 180 MAX 1,230 MIN 13 AC-FT 130,500

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

14308000 SOUTH UMPQUA RIVER AT TILLER, OREG.

LOCATION.--Lat 42°55'50", long 122°56'50", in NE¼ sec.33, T.30 S., R.2 W., Douglas County, on right bank 0.3 mi (0.5 km) upstream from bridge on State Highway 227 at Tiller, 0.3 mi (0.5 km) upstream from Elk Creek, and at mile 187.31 (301.38 km).

DRAINAGE AREA.--449 mi^2 (1,163 km^2).

PERIOD OF RECORD.--October 1910 to December 1911, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to Decembe 1911, published as South Fork of Umpqua River at Tiller.

GAGE.--Water-stage recorder. Datum of gage is 991.8 ft (302.30 m) above mean sea level (river-profile survey). Prior to Oct. 1, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--35 years, 1,033 ft^3/s (29.3 m^3/s), 31.24 in/yr (793 mm/yr), 748,400 acre-ft/yr (923 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,800 ft^3/s (193 m^3/s) Jan. 12, gage height, 8.53 ft (2.600 m); minimum, 33 ft^3/s (0.93 m^3/s) Sept. 14-17.
Period of record: Maximum discharge, 60,200 ft^3/s (1,700 m^3/s) Dec. 22, 1964, gage height, 25.72 ft (7.839 m); minimum observed, 20 ft^3/s (0.57 m^3/s) Sept. 3, 4, 1911.

REMARKS.--Records good. No regulation. Small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1448: 1911(M), 1912, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	90	280	787	844	723	1,640	697	234	101	49	41
2	60	125	260	765	793	744	1,510	653	225	99	47	40
3	58	120	400	744	755	702	1,320	643	213	95	47	40
4	58	280	340	648	744	728	1,240	692	204	93	47	39
5	58	350	280	581	879	744	1,270	638	193	91	46	39
6	57	200	260	527	1,070	702	1,200	591	184	89	46	36
7	53	170	220	453	934	638	1,020	558	176	85	46	37
8	53	210	170	424	838	586	885	545	168	85	44	44
9	55	187	190	411	787	545	821	531	163	83	44	44
10	79	193	180	419	850	1,100	793	509	160	81	44	40
11	257	179	170	885	915	1,510	771	483	152	77	44	39
12	257	152	210	3,920	946	1,150	771	483	147	76	44	36
13	160	133	200	4,730	885	1,060	1,320	522	150	76	43	34
14	130	125	160	3,410	810	1,000	1,070	572	142	72	41	34
15	125	116	160	2,360	804	922	903	586	145	70	40	33
16	99	108	181	3,110	728	903	862	563	147	68	39	33
17	91	105	1,920	2,850	687	940	1,470	540	219	67	39	34
18	83	101	2,330	2,280	643	885	1,730	509	231	66	39	36
19	77	142	2,770	1,930	595	1,250	2,140	457	184	64	40	40
20	74	294	2,450	1,530	545	1,590	2,080	407	163	64	40	60
21	72	247	2,240	1,310	500	1,510	1,780	367	147	62	39	83
22	70	287	4,340	1,160	475	1,530	1,710	337	137	62	39	74
23	68	237	3,600	1,010	445	1,310	1,600	319	160	60	39	135
24	67	195	3,810	928	428	1,180	1,380	387	140	60	41	297
25	65	170	2,530	1,220	462	1,140	1,200	457	130	60	68	436
26	65	500	1,710	1,100	470	1,030	1,120	363	128	58	72	190
27	62	600	1,430	946	577	909	1,090	319	121	57	53	121
28	80	420	1,590	856	554	868	998	290	114	55	49	93
29	90	340	1,310	844	------	787	868	273	110	53	46	79
30	80	300	1,020	856	------	1,040	771	260	105	52	44	72
31	75	------	915	953	------	1,860	------	253	------	50	43	------
TOTAL	2,739	6,676	37,626	43,947	19,963	31,586	37,333	14,804	4,892	2,231	1,402	2,359
MEAN	88.4	223	1,214	1,418	713	1,019	1,244	478	163	72.0	45.2	78.6
MAX	257	600	4,340	4,730	1,070	1,860	2,140	697	234	101	72	436
MIN	53	90	160	411	428	545	771	253	105	50	39	33
CFSM	.20	.50	2.70	3.16	1.59	2.27	2.77	1.06	.36	.16	.10	.18
IN.	.23	.55	3.12	3.64	1.65	2.62	3.09	1.23	.41	.18	.12	.20
AC-FT	5,430	13,240	74,630	87,170	39,600	62,650	74,050	29,360	9,700	4,430	2,780	4,680

CAL YR 1972 TOTAL 512,637 MEAN 1,401 MAX 29,800 MIN 53 CFSM 3.12 IN 42.47 AC-FT 1,017,000
WTR YR 1973 TOTAL 205,558 MEAN 563 MAX 4,730 MIN 33 CFSM 1.25 IN 17.03 AC-FT 407,700

PEAK DISCHARGE (BASE, 7,000 CFS).--No peak above base.

14308500 ELK CREEK NEAR DREW, OREG.

LOCATION.--Lat 42°53'25", long 122°55'00", in SW¼ sec.11, T.31 S., R.2 W., Douglas County, on right bank 100 ft (30 m) downstream from Dixon Creek, 0.1 mi (0.2 km) upstream from Drew Creek, 1.3 mi (2.1 km) northwest of Drew, 3.3 mi (5.3 km) southeast of Tiller, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--54.4 mi^2 (140.9 km^2).

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,279.25 ft (389.915 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 84.1 ft^3/s (2.33 m^3/s), 60,930 acre-ft/yr (75.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 852 ft^3/s (24.1 m^3/s) Jan. 16, gage height, 5.08 ft (1.548 m); minimum, 0.01 ft^3/s (0.0003 m^3/s) Aug. 9, 18-23.

Period of record: Maximum discharge, 8,880 ft^3/s (251 m^3/s) Dec. 22, 1964, gage height, 10.61 ft (3.234 m), from rating curve extended above 2,900 ft^3/s (82.1 m^3/s) on basis of slope-area measurement at gage height 10.34 ft (3.152 m); minimum, 0.01 ft^3/s (0.0003 m^3/s) Aug. 9, 18-23, 1973.

Maximum stage, 11.8 ft (3.60 m), from floodmarks, probably for flood in January or November 1953, discharge, about 11,000 ft^3/s (312 m^3/s).

REMARKS.--Records good except those for period of no gage-height record, which are fair. No regulation. Several diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	3.4	11	62	98	70	200	38	6.0	2.0	.03	.03
2	1.0	3.9	9.8	61	82	55	158	34	5.6	1.8	.03	.04
3	1.0	5.3	19	58	75	54	129	31	6.0	1.7	.03	.11
4	1.0	19	17	49	72	53	116	34	5.6	1.5	.04	.04
5	1.1	22	13	42	95	49	114	33	4.9	1.4	.03	.06
6	1.1	12	13	38	102	47	107	29	4.2	1.3	.03	.03
7	.90	9.8	11	32	88	43	90	27	4.2	1.2	.02	.04
8	1.0	11	9.2	28	79	41	75	25	3.9	1.1	.02	.04
9	1.1	11	8.5	27	75	38	66	22	3.6	1.0	.02	.03
10	4.2	16	8.0	30	105	58	59	21	3.4	.80	.02	.18
11	13	13	8.0	64	105	73	53	19	3.2	.75	.02	.14
12	11	9.8	7.8	388	95	63	54	18	3.1	.70	.03	.04
13	6.0	7.7	7.8	388	85	72	304	16	3.1	.65	.06	.02
14	3.9	6.4	7.5	230	80	82	183	16	3.0	.60	.03	.14
15	3.4	5.6	7.7	163	80	78	129	14	3.0	.55	.02	.03
16	2.9	4.9	44	552	70	85	105	13	3.2	.50	.02	.02
17	2.4	4.6	208	350	65	112	126	12	4.0	.60	.02	.02
18	2.0	3.9	294	272	60	114	178	11	6.5	.65	.02	.03
19	2.0	10	311	230	55	263	257	10	4.5	.65	.01	.32
20	2.0	19	220	168	50	284	239	10	3.5	.60	.01	1.3
21	1.9	16	215	145	48	254	195	9.8	3.3	.45	.02	1.9
22	1.9	15	575	116	46	218	165	8.7	3.3	.35	.01	1.6
23	1.9	12	304	95	44	173	139	8.7	3.2	.30	.04	3.9
24	1.9	9.8	278	87	42	149	112	11	3.2	.38	.11	4.6
25	1.7	8.2	170	135	46	141	90	12	3.1	.18	.50	5.6
26	1.7	12	116	118	55	126	76	9.8	3.0	.22	.80	3.6
27	1.7	23	96	96	60	112	64	8.7	2.8	.11	.72	2.4
28	2.4	19	111	96	60	124	55	7.7	2.6	.11	.58	1.9
29	4.9	15	92	105	------	114	49	7.2	2.4	.08	.38	1.6
30	3.9	13	75	111	------	200	43	6.8	2.2	.08	.38	1.5
31	3.4	------	75	126	------	266	------	6.8	------	.06	.38	------
TOTAL	89.30	341.3	3,342.3	4,462	2,017	3,611	3,730	530.2	113.6	22.37	4.43	31.26
MEAN	2.88	11.4	108	144	72.0	116	124	17.1	3.79	.72	.14	1.04
MAX	13	23	575	552	105	284	304	38	6.5	2.0	.80	5.6
MIN	.90	3.4	7.5	27	42	38	43	6.8	2.2	.06	.01	.02
AC-FT	177	677	6,630	8,850	4,000	7,160	7,400	1,050	225	44	8.8	62

CAL YR 1972 TOTAL 32,585.12 MEAN 89.0 MAX 2,040 MIN .23 AC-FT 64,630
WTR YR 1973 TOTAL 18,294.76 MEAN 50.1 MAX 575 MIN .01 AC-FT 36,290

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

NOTE.--No gage-height record June 9 to July 24.

14309000 COW CREEK NEAR AZALEA, OREG.

LOCATION.--Lat 42°49'30", long 123°10'40", in N½ sec.4, T.32 S., R.4 W., Douglas County, on right bank 0.8 mi (1.3 km) upstream from Whitehorse Creek, 4.5 mi (7.2 km) northeast of Azalea, and at mile 58.2 (93.6 km).

DRAINAGE AREA.--78.0 mi^2 (202.0 km^2).

PERIOD OF RECORD.--April 1926 to September 1928 (no winter records), April 1929 to December 1931, April 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,694.32 ft (516.429 m) above mean sea level (Douglas County Road Department bench mark). Prior to July 19, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--43 years (1929-31, 1932-73), 109 ft^3/s (3.087 m^3/s), 18.98 in/yr (482 mm/yr), 78,970 acre-ft/yr (97.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 818 ft^3/s (23.2 m^3/s) Dec. 22, gage height, 4.70 ft (1.433 m); minimum, 6.8 ft^3/s (0.19 m^3/s) Sept. 5, 6.

Period of record: Maximum discharge, 8,430 ft^3/s (239 m^3/s) Dec. 22, 1964, gage height, 15.63 ft (4.764 m); minimum recorded, 1.2 ft^3/s (0.034 m^3/s) Sept. 2, 1970, but may have been less during period of no gage-height record Sept. 4-30, 1970.

REMARKS.--Records good. No regulation. Diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 984: 1933-36. WSP 1154: 1946(M), 1948(M). WSP 1448: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	22	61	108	82	205	67	22	13	7.2	8.3
2	13	22	21	61	97	76	203	62	21	12	7.9	7.9
3	12	26	29	59	93	72	174	60	21	11	7.9	7.2
4	13	44	29	53	91	75	156	65	21	11	7.9	7.2
5	13	43	22	49	106	74	154	60	20	11	7.9	6.9
6	13	27	24	46	111	71	149	55	19	11	7.6	6.9
7	12	24	24	38	102	66	133	52	18	10	7.9	7.2
8	12	27	20	38	94	62	118	50	18	10	7.9	7.9
9	13	27	19	41	97	60	109	47	18	10	7.6	7.9
10	23	32	18	39	106	75	102	44	19	10	7.9	7.9
11	36	28	18	70	111	78	94	43	17	10	7.9	7.2
12	31	24	17	367	103	71	91	41	17	11	7.9	7.2
13	22	22	17	379	91	84	259	39	19	10	7.6	6.9
14	20	22	17	237	87	90	166	39	17	9.7	7.2	7.2
15	19	21	21	176	88	87	133	36	18	9.0	7.2	7.2
16	18	20	30	467	80	96	118	33	19	9.0	6.9	7.9
17	18	20	119	317	75	117	127	32	23	8.6	7.2	7.9
18	18	20	238	237	71	111	130	30	21	8.3	7.9	8.6
19	18	31	293	197	67	223	166	28	19	8.3	7.9	10
20	18	36	201	156	62	259	205	29	17	9.3	7.9	17
21	18	29	187	142	59	225	176	28	15	9.7	7.6	17
22	18	27	542	125	57	205	154	28	15	9.3	7.6	15
23	18	25	265	109	53	176	138	27	15	9.3	7.6	30
24	17	24	277	106	53	161	123	31	15	9.0	8.6	22
25	17	22	161	149	63	156	111	36	15	7.9	11	23
26	17	23	114	118	61	144	100	29	15	7.6	11	16
27	18	29	100	105	74	135	93	27	14	7.6	9.7	13
28	20	27	102	100	67	147	85	25	14	7.9	9.0	12
29	26	25	88	108	------	140	79	24	13	7.6	8.6	11
30	21	24	75	117	------	170	72	23	13	7.2	8.3	11
31	20	------	70	137	------	209	------	22	------	7.2	8.3	------
TOTAL	564	791	3,180	4,404	2,327	3,797	4,123	1,212	528	292.5	250.6	332.4
MEAN	18.2	26.4	103	142	83.1	122	137	39.1	17.6	9.44	8.08	11.1
MAX	36	44	542	467	111	259	259	67	23	13	11	30
MIN	12	20	17	38	53	60	72	22	13	7.2	6.9	6.9
CFSM	.23	.34	1.32	1.82	1.07	1.56	1.76	.50	.23	.12	.10	.14
IN.	.27	.38	1.52	2.10	1.11	1.81	1.97	.58	.25	.14	.12	.16
AC-FT	1,120	1,570	6,310	8,740	4,620	7,530	8,180	2,400	1,050	580	497	659

CAL YR 1972 TOTAL 43,625.0 MEAN 119 MAX 2,110 MIN 8.9 CFSM 1.53 IN 20.81 AC-FT 86,530
WTR YR 1973 TOTAL 21,801.5 MEAN 59.7 MAX 542 MIN 6.9 CFSM .77 IN 10.40 AC-FT 43,240

PEAK DISCHARGE (BASE, 1,300 CFS).--No peak above base.

14309500 WEST FORK COW CREEK NEAR GLENDALE, OREG.

LOCATION.--Lat 42°48'15", long 123°36'35", in SW¼NE¼ sec.11, T.32 S., R.8 W., Douglas County, on left bank 1.6 mi (2.6 km) downstream from Bear Creek, 11 mi (18 km) northwest of Glendale, and at mile 0.8 (1.3 km).

DRAINAGE AREA.--86.9 mi² (225.1 km²).

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,000 ft (305 m), from topographic map. Prior to June 8, 1964, at site 0.6 mi (1.0 km) upstream at different datum.

AVERAGE DISCHARGE.--18 years, 280 ft³/s (7.93 m³/s), 43.76 in/yr (1,112 mm/yr), 202,900 acre-ft/yr (250 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,640 ft³/s (74.8 m³/s) Dec. 22, gage height, 7.72 ft (2.353 m); minimum, 6.2 ft³/s (0.18 m³/s) Aug. 15, Sept. 13.

Period of record: Maximum discharge, 15,700 ft³/s (445 m³/s) Dec. 22, 1964, gage height, 18.59 ft (5.666 m), from floodmark, from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of slope-area measurement of peak flow; minimum, 6.2 ft³/s (0.18 m³/s) Aug. 15, Sept. 13, 1973.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1738: 1956, drainage area (former site). WSP 1935: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	53	245	371	420	447	78	30	16	7.7	7.4
2	11	18	49	228	317	405	475	74	29	15	7.7	7.1
3	11	45	96	211	281	348	410	69	29	15	7.4	7.1
4	10	110	114	189	245	281	344	72	28	14	7.4	7.1
5	10	100	85	169	249	242	294	68	26	14	7.4	6.8
6	10	57	82	155	265	221	249	63	25	14	7.7	6.5
7	10	70	65	140	245	192	211	60	25	14	7.7	6.8
8	10	72	54	130	218	169	186	59	24	14	7.7	7.4
9	10	70	50	125	208	155	163	54	23	14	7.4	7.4
10	15	157	50	123	208	208	147	53	23	13	7.7	7.1
11	30	108	50	238	196	245	132	50	23	13	7.7	6.8
12	25	70	49	1.010	196	228	125	49	23	13	7.4	6.5
13	19	56	49	1.490	186	257	118	47	23	13	7.1	6.5
14	16	47	48	922	177	299	109	44	23	13	6.8	6.5
15	15	39	47	607	160	290	101	42	24	12	6.8	6.5
16	14	36	768	1.600	147	294	96	41	23	11	6.8	6.8
17	13	35	2.030	1.220	140	375	109	39	28	11	6.8	6.8
18	13	35	1.710	938	132	308	132	38	28	10	7.1	7.1
19	13	259	1.360	834	125	458	218	37	24	10	7.1	9.0
20	12	221	754	594	114	576	218	37	22	10	7.1	13
21	12	121	677	498	109	534	180	37	21	11	7.4	18
22	12	94	2.050	425	105	458	158	36	19	10	7.4	16
23	12	76	1.290	366	97	395	140	35	18	10	7.4	18
24	12	64	1.380	447	101	357	127	44	18	10	7.7	21
25	12	53	705	740	558	330	114	48	18	10	8.8	30
26	12	61	458	570	425	281	105	39	18	9.2	8.8	26
27	12	82	385	431	357	257	97	36	18	8.8	8.4	22
28	16	72	425	353	294	265	92	34	16	8.0	8.0	20
29	35	67	405	303	------	238	86	33	16	8.0	7.7	17
30	26	58	326	326	------	261	83	31	16	7.7	7.7	16
31	19	------	285	425	------	362	------	30	------	7.7	7.4	------
TOTAL	459	2.371	15.949	16.052	6.226	9.669	5.466	1.477	681	359.4	233.2	350.2
MEAN	14.8	79.0	514	518	222	312	182	47.6	22.7	11.6	7.52	11.7
MAX	35	259	2.050	1.600	558	576	475	78	30	16	8.8	30
MIN	10	18	47	123	97	155	83	30	16	7.7	6.8	6.5
CFSM	.17	.91	5.91	5.96	2.55	3.59	2.09	.55	.26	.13	.09	.13
IN.	.20	1.01	6.83	6.87	2.67	4.14	2.34	.63	.29	.15	.10	.15
AC-FT	910	4.700	31.630	31.840	12.350	19.180	10.840	2.930	1.350	713	463	695

CAL YR 1972 TOTAL 110.203.6 MEAN 301 MAX 5.600 MIN 7.5 CFSM 3.46 IN 47.18 AC-FT 218.600
WTR YR 1973 TOTAL 59.292.8 MEAN 162 MAX 2.050 MIN 6.5 CFSM 1.86 IN 25.38 AC-FT 117.600

PEAK DISCHARGE (BASE, 2,500 CFS).--Dec. 22 (1130) 2,640 cfs (7.72 ft).

14310000 COW CREEK NEAR RIDDLE, OREG.

LOCATION.--Lat 42°55'25", long 123°25'40", in NE¼ sec.32, T.30 S., R.6 W., Douglas County, on left bank 0.4 mi (0.6 km) upstream from Council Creek, 3.8 mi (6.1 km) southwest of Riddle, and at mile 6.7 (10.8 km).

DRAINAGE AREA.--456 mi^2 (1,181 km^2).

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 682.60 ft (208.056 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 910 ft^3/s (25.8 m^3/s), 659,300 acre-ft/yr (813 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,220 ft^3/s (176 m^3/s) Dec. 22, gage height, 8.40 ft (2.560 m); minimum, 17 ft^3/s (0.48 m^3/s) many days in August and September.

Period of record: Maximum discharge, 37,500 ft^3/s (1,060 m^3/s) Dec. 22, 1964, gage height, 27.67 ft (8.434 m); minimum, 17 ft^3/s (0.48 m^3/s) Sept. 14, 1971, and many days in August and September 1973.

Flood of Oct. 29, 1950, reached a stage of about 28.5 ft (8.69 m), present site and datum, from slope-area measurement, discharge, 41,100 ft^3/s (1,160 m^3/s).

REMARKS.--Records excellent. No regulation. Many small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1935: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	73	137	588	1.130	853	1.140	283	99	50	19	19
2	43	71	132	554	993	888	1.230	268	94	48	18	19
3	43	96	207	534	874	811	1.130	249	94	46	19	19
4	42	268	323	501	797	741	985	249	92	43	18	19
5	43	329	258	450	769	678	881	258	88	42	17	18
6	42	211	236	419	804	636	797	241	86	41	17	17
7	42	192	220	384	762	567	713	228	81	40	18	17
8	41	185	200	350	692	514	636	215	79	39	18	17
9	45	174	190	339	664	469	574	204	75	37	19	18
10	58	318	180	334	678	514	521	192	73	35	19	19
11	121	312	170	494	678	650	481	185	75	34	18	18
12	118	211	160	1.800	657	615	450	181	73	33	18	17
13	106	164	150	3.820	615	643	501	174	75	32	18	17
14	88	145	140	2.790	567	706	581	171	73	32	18	17
15	75	126	132	1.740	534	699	469	161	73	30	17	17
16	70	116	561	4.490	494	685	425	151	75	27	17	17
17	65	111	3.430	4.090	462	797	438	145	84	26	17	18
18	61	106	3.300	2.780	438	776	488	140	90	25	17	19
19	61	334	3.300	2.520	413	1.000	608	134	84	24	17	21
20	59	540	2.200	1.850	390	1.940	671	134	77	25	17	39
21	58	329	1.520	1.530	373	1.760	636	132	73	28	17	52
22	58	249	4.460	1.280	350	1.510	561	129	70	29	17	42
23	56	207	3.290	1.090	339	1.270	507	126	65	28	17	59
24	55	177	3.420	1.050	334	1.120	469	134	65	27	19	94
25	55	151	2.000	1.810	867	1.010	425	151	63	26	21	113
26	55	142	1.260	1.750	860	903	390	142	63	25	23	90
27	53	174	963	1.380	839	811	361	129	59	23	22	70
28	61	171	940	1.140	762	804	339	116	55	22	21	58
29	101	164	881	1.000	------	748	318	111	50	21	21	52
30	96	148	762	978	------	762	302	108	50	21	21	48
31	81	------	664	1.260	------	993	------	101	------	20	20	------
TOTAL	1.998	5.994	35.786	45.095	18.135	26.873	18.027	5.342	2.253	979	575	1.060
MEAN	64.5	200	1.154	1.455	648	867	601	172	75.1	31.6	18.5	35.3
MAX	121	540	4.460	4.490	1.130	1.940	1.230	283	99	50	23	113
MIN	41	71	132	334	334	469	302	101	50	20	17	17
AC-FT	3.960	11.890	70.980	89.450	35.970	53.300	35.760	10.600	4.470	1.940	1.140	2.100

CAL YR 1972 TOTAL 338.116 MEAN 924 MAX 16.600 MIN 24 AC-FT 670.700
WTR YR 1973 TOTAL 162.117 MEAN 444 MAX 4.490 MIN 17 AC-FT 321.600

PEAK DISCHARGE (BASE, 10,000 CFS).--No peak above base.

14311000 NORTH MYRTLE CREEK NEAR MYRTLE CREEK, OREG.

LOCATION.--Lat 43°02'30", long 123°15'30", in SW¼ sec.14, T.29 S., R.5 W., Douglas County, on right bank 0.1 mi (0.2 km) downstream from Bilger Creek, 1.5 mi (2.4 km) northeast of town of Myrtle Creek, and at mile 2.1 (3.4 km).

DRAINAGE AREA.--54.2 mi^2 (140.4 km^2)

PERIOD OF RECORD.--October 1955 to currdnt year.

GAGE.--Water-stage recorder. Datum of gage is 641.18 ft (195.432 m) above mean sea level (Douglas County Road Department bench mark).

AVERAGE DISCHARGE.--18 years, 74.7 ft^3/s (2.12 m^3/s), 54,120 acre-ft/yr (66.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 270 ft^3/s (7.65 m^3/s) Mar. 20, gage height, 3.04 ft (0.927 m); no flow for part of July 30 and probably at other times during periods of no gage-height record July 16-19, 27-30.

Period of record: Maximum discharge, 3,260 ft^3/s (92.3 m^3/s) Jan. 20, 1964, gage height, 10.51 ft (3.203 m), from rating curve extended above 1,800 ft^3/s (51.0 m^3/s); maximum gage height, 11.58 ft (3.530 m) Dec. 26, 1955 (backwater from debris); no flow for part of July 30, 1973, and probably at other time during periods of no gage-height record July 16-19, 27-30, 1973.

REMARKS.--Records good above 5 ft^3/s (0.14 m^3/s), poor below. No regulation. Several diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1738: 1957.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	11	12	52	75	34	197	36	9.2	4.5	.12	1.8
2	3.7	13	11	55	68	34	219	33	9.2	3.7	.12	1.7
3	3.9	17	32	59	63	35	178	32	8.9	2.7	.83	1.2
4	4.0	34	36	59	59	36	139	33	8.9	2.5	1.2	1.4
5	4.0	30	28	56	55	34	111	31	8.2	2.8	.33	1.2
6	3.9	17	25	53	52	33	89	28	7.7	2.5	.12	.98
7	3.7	13	20	47	47	32	74	26	6.8	2.7	.28	4.5
8	3.7	13	18	43	44	29	64	25	6.6	2.2	.33	4.6
9	5.0	12	17	41	47	28	56	22	6.6	2.7	1.1	1.5
10	12	14	17	40	45	43	49	21	6.6	2.3	.57	1.2
11	16	13	16	57	43	49	44	20	6.4	3.3	1.3	1.1
12	11	11	15	129	43	47	43	19	7.1	3.4	1.8	1.0
13	9.5	10	15	194	39	52	117	18	8.0	2.3	.83	1.0
14	8.8	9.1	15	149	38	61	91	17	7.5	1.5	.38	.90
15	8.8	8.8	15	113	45	63	75	16	7.7	1.5	.11	.90
16	8.5	8.8	28	141	42	66	72	14	8.9	1.2	.33	.90
17	8.2	9.1	80	156	41	83	93	13	14	.80	.90	1.1
18	8.2	9.1	93	134	39	79	151	13	12	.40	1.1	1.5
19	8.2	15	74	108	37	151	229	13	7.7	.20	1.5	3.2
20	8.5	23	65	91	34	248	224	12	7.3	2.6	1.3	4.8
21	8.5	20	61	83	33	202	175	11	5.9	5.3	1.1	3.6
22	8.5	22	124	74	31	165	136	11	5.3	3.4	1.0	2.8
23	8.5	17	134	68	28	129	106	13	6.1	2.7	1.0	2.4
24	8.5	15	149	65	28	106	87	17	5.3	2.3	1.2	10
25	8.8	12	106	106	28	87	72	18	5.1	2.2	2.6	20
26	9.1	13	77	122	28	72	63	14	4.9	1.7	2.4	14
27	9.1	15	65	106	28	71	55	12	4.7	1.4	2.4	7.0
28	14	14	66	91	28	85	49	12	4.5	.50	2.2	4.6
29	19	14	71	80	------	75	44	11	4.5	.10	2.2	3.6
30	13	12	64	77	------	102	40	9.9	5.1	.10	2.0	3.0
31	11	------	57	83	------	149	------	9.9	------	.12	2.0	------
TOTAL	261.5	444.9	1.606	2.732	1.188	2.480	3.142	580.8	216.7	65.62	34.65	107.48
MEAN	8.44	14.8	51.8	88.1	42.4	80.0	105	18.7	7.22	2.12	1.12	3.58
MAX	19	34	149	194	75	248	229	36	14	5.3	2.6	20
MIN	3.7	8.8	11	40	28	28	40	9.9	4.5	.10	.11	.90
AC-FT	519	882	3.190	5.420	2.360	4.920	6.230	1.150	430	130	69	213

CAL YR 1972 TOTAL 27.318.60 MEAN 74.6 MAX 1.620 MIN 2.3 AC-FT 54.190
WTR YR 1973 TOTAL 12.859.65 MEAN 35.2 MAX 248 MIN .10 AC-FT 25.510

PEAK DISCHARGE (BASE, 1,100 CFS).--No peak above base.

14311200 OLALLA CREEK NEAR TENMILE, OREG.

LOCATION.--Lat 43°02'20", long 123°32'35", in NW¼ sec.21, T.29 S., R.7 W., Douglas County, on left bank 0.5 mi (0.8 km) downstream from Berry Creek, 4.4 mi (7.1 km) south of Tenmile, and at mile 11.7 (18.8 km).

DRAINAGE AREA.--61.3 mi^2 (158.8 km^2).

PERIOD OF RECORD.--October 1956 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 749.53 ft (228.457 m) above mean sea level. Prior to June 21, 1957, nonrecording gage at site 0.3 mi (0.5 km) downstream at datum 7.83 ft (2.387 m) lower.

AVERAGE DISCHARGE.--17 years, 102 ft^3/s (2.89 m^3/s), 73,900 acre-ft/yr (91.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 698 ft^3/s (19.8 m^3/s) Dec. 22, gage height, 3.92 ft (1.195 m); no flow July 19, 27, Aug. 1 to Sept. 18.

Period of record: Maximum discharge, 9,160 ft^3/s (259 m^3/s) Jan. 3, 1966, gage height, 11.98 ft (3.652 m), from floodmark; no flow at times.

Maximum stage since at least 1920, 13.6 ft (4.15 m) Dec. 26, 1955, from floodmarks, present site and datum, discharge, 12,300 ft^3/s (348 m^3/s), from rating curve extended above 6,000 ft^3/s (170 m^3/s).

REMARKS.--Records good except those below 10 ft^3/s (0.28 m^3/s) and those for period of no gage-height record, which are fair. No regulation. Some diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1935: 1959(M). WSP 2135: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.91	3.0	9.0	62	116	68	151	24	4.2	1.1		0
2	.91	2.8	8.5	66	104	71	145	22	4.0	1.1		0
3	.59	5.5	12	74	90	68	119	20	3.8	1.1		0
4	.07	18	26	75	80	63	98	21	3.8	1.0		0
5	.07	19	28	68	75	56	81	20	3.6	1.0		0
6	.10	11	18	62	72	51	66	19	3.6	.91		0
7	.10	8.1	11	54	66	45	55	18	3.4	.82		0
8	.07	7.7	8.0	49	60	40	49	16	3.2	.82		0
9	.07	9.5	8.0	45	57	36	42	15	2.8	.82		0
10	.73	12	8.0	46	57	51	37	14	2.8	.73		0
11	2.4	10	8.0	82	54	65	33	14	2.7	.66		0
12	2.0	8.0	8.5	263	55	63	31	13	2.5	.31		0
13	1.2	7.0	8.5	490	51	63	40	12	2.5	.16		0
14	.82	6.0	9.5	337	50	57	32	11	2.7	.10		0
15	.59	5.0	9.5	199	45	52	28	9.9	2.7	.07		0
16	.52	5.0	40	518	42	52	27	9.0	2.7	.04		0
17	.45	5.0	275	457	40	57	41	8.5	3.8	.03		0
18	.45	5.5	223	325	38	55	66	7.7	4.2	.01		0
19	.38	40	177	319	35	95	120	7.4	3.4	0		.50
20	.45	32	117	265	33	199	119	7.0	2.7	.09		1.0
21	.45	26	100	235	31	211	94	6.7	2.5	.31		1.5
22	.45	20	475	201	30	177	76	6.7	2.4	.59		1.5
23	.38	15	300	154	28	140	62	6.7	2.0	.66		2.0
24	.45	12	278	145	27	113	52	8.1	1.7	.59		6.0
25	.45	9.5	167	255	58	94	45	9.0	1.7	.16		6.0
26	.52	11	107	260	60	77	40	7.0	1.7	.02		3.0
27	.91	12	92	195	60	67	35	6.4	1.6	0		2.0
28	2.0	11	106	146	57	65	31	5.8	1.4	.19		1.5
29	3.2	10	95	119	------	56	28	5.5	1.3	.07		1.0
30	3.0	9.5	80	110	------	68	26	5.0	1.2	.01		1.0
31	3.4	------	71	127	------	121	------	4.5	------	.02		------
TOTAL	28.09	356.1	2.883.5	5.803	1.571	2.496	1.869	359.9	82.6	13.49	0	27.00
MEAN	.91	11.9	93.0	187	56.1	80.5	62.3	11.6	2.75	.44	0	.90
MAX	3.4	40	475	518	116	211	151	24	4.2	1.1	0	6.0
MIN	.07	2.8	8.0	45	27	36	26	4.5	1.2	0	0	0
AC-FT	56	706	5.720	11.510	3.120	4.950	3.710	714	164	27	0	54

CAL YR 1972 TOTAL 38.500.35 MEAN 105 MAX 3.080 MIN 0 AC-FT 76.370
WTR YR 1973 TOTAL 15.489.68 MEAN 42.4 MAX 518 MIN 0 AC-FT 30.720

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

NOTE.--No gage-height record Nov. 9 to Dec. 14.

14311300 TENMILE CREEK AT TENMILE, OREG.

LOCATION.--Lat 43°05'30", long 123°34'05", in SE¼ sec.31 T.28 S., R.7 W., Douglas County, on left bank 50 ft (15 m) downstream from State Highway 42 bridge, 200 ft (61 m) south of Tenmile post office. 0.4 mi (0.6 km) downstream from Shields Creek, and at mile 3.7 (6.0 km).

DRAINAGE AREA.--29.6 mi² (76.7 km²).

PERIOD OF RECORD.--October 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 671.41 ft (204.646 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 67.7 ft³/s (1.92 m³/s), 49,050 acre-ft/yr (60.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 478 ft³/s (13.5 m³/s) Jan. 13, gage height, 4.88 ft (1.487 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 10.

Period of record: Maximum discharge, 3,650 ft³/s (103 m³/s) Jan. 17, 1971 (from measurement); maximum gage height, 13.14 ft (4.005 m) Jan. 17, 1971 (backwater); no flow Aug. 29, 30, Sept. 7-12, 1972.

REMARKS.--Records fair. No regulation. Some diversions for irrigation above station.

REVISIONS (WATER YEARS).--WRD Oreg. 1971: 1968(P), 1969(P), 1970(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	1.8	5.5	55	80	38	98	14	3.7	.95	.10	.20
2	.50	2.0	5.2	51	69	38	87	14	3.4	.74	.10	.20
3	.58	5.5	16	49	59	39	71	13	3.4	.66	.10	.22
4	.58	10	17	48	51	38	57	14	3.2	.74	.10	.20
5	.58	8.8	13	47	48	35	48	12	3.2	.66	.10	.10
6	.58	5.1	8.8	45	44	31	41	12	2.7	.74	.10	.10
7	.58	3.9	4.0	41	42	28	36	11	2.7	.74	.10	.20
8	.50	3.5	4.0	38	38	26	31	10	2.4	.58	.10	.10
9	.58	3.4	4.0	35	36	24	28	9.7	2.1	.66	.27	.05
10	1.8	5.4	4.0	36	35	40	26	9.0	1.9	.66	.30	.02
11	2.2	5.0	4.0	56	32	50	23	8.3	1.7	.27	.25	.04
12	1.4	3.9	6.0	221	31	47	22	8.1	1.9	.20	.20	.07
13	1.3	3.3	8.0	346	28	48	28	7.7	2.0	.20	.12	.05
14	1.6	2.8	8.5	222	28	44	23	7.4	2.7	.44	.10	.09
15	1.3	2.4	7.5	139	27	40	20	7.2	2.4	.44	.10	.05
16	.94	2.4	46	296	25	39	20	6.8	2.9	.44	.10	.10
17	.84	2.4	263	251	24	39	30	6.5	4.8	.30	.10	.44
18	.84	2.5	180	213	23	36	39	6.2	4.0	.20	.10	.58
19	.74	25	129	214	23	89	69	6.2	3.0	.20	.20	.94
20	.74	21	97	179	22	138	60	5.8	2.3	.50	.20	2.0
21	.74	14	83	164	21	120	48	5.7	2.0	.66	.18	1.4
22	.74	12	319	130	20	94	39	5.8	1.7	.58	.15	1.3
23	.74	9.4	228	100	20	77	32	6.1	1.6	.50	.10	2.4
24	.74	7.3	224	100	19	63	28	7.2	1.2	.50	.66	5.9
25	.74	5.9	130	136	29	53	25	6.8	1.2	.32	.94	5.9
26	.74	7.4	86	126	29	46	23	6.1	1.3	.22	.84	2.4
27	.74	8.1	127	100	31	42	20	5.8	.88	.20	.66	1.6
28	1.6	7.4	181	81	31	40	18	5.6	.87	.20	.58	1.3
29	3.3	6.6	130	68	------	36	16	4.8	.78	.20	.27	1.2
30	2.2	5.9	91	75	------	42	16	4.0	1.0	.10	.22	1.0
31	1.8	------	69	91	------	60	------	3.8	------	.10	.20	------
TOTAL	32.84	204.1	2,498.5	3,753	965	1,580	1,122	250.6	68.93	13.90	7.64	30.15
MEAN	1.06	6.80	80.6	121	34.5	51.0	37.4	8.08	2.30	.45	.25	1.01
MAX	3.3	25	319	346	80	138	98	14	4.8	.95	.94	5.9
MIN	.50	1.8	4.0	35	19	24	16	3.8	.78	.10	.10	.02
CFSM	.04	.23	2.72	4.09	1.17	1.72	1.26	.27	.08	.02	.008	.03
IN.	.04	.26	3.14	4.72	1.21	1.99	1.41	.31	.09	.02	.009	.04
AC-FT	65	405	4,960	7,440	1,910	3,130	2,230	497	137	28	15	60

CAL YR 1972 TOTAL 24,683.85 MEAN 67.4 MAX 2,090 MIN 0 CFSM 2.28 IN 31.02 AC-FT 48,960
WTR YR 1973 TOTAL 10,526.66 MEAN 28.8 MAX 346 MIN .02 CFSM .97 IN 13.23 AC-FT 20,880

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

14311500 LOOKINGGLASS CREEK AT BROCKWAY, OREG.

LOCATION.--Lat 43°07'50", long 123°27'50", in SE¼SE¼ sec.13, T.28 S., R.7 W., Douglas County, on left bank 1.7 mi (2.7 km) northwest of Brockway and at mile 2.85 (4.59 km).

DRAINAGE AREA.--158 mi² (409 km²).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (165 m), from topographic map. Prior to Oct. 5, 1967, water-stage recorder at site 2.3 mi (3.7 km) downstream at different datum.

AVERAGE DISCHARGE.--18 years, 297 ft³/s (8.41 m³/s), 215,200 acre-ft/yr (261 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,680 ft³/s (47.6 m³/s) Jan. 13, gage height, 5.46 ft (1.664 m); no flow Oct. 1-9, July 16 to Sept. 18.

Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) Dec. 26, 1955, gage height, 24.93 ft (7.599 m), site and datum then in use, from rating curve extended above 7,200 ft³/s (204 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 25.28 ft (7.705 m) Dec. 23, 1964 (backwater from South Umpqua River, site and datum then in use); no flow at times each year.

REMARKS.--Records good. No regulation. Many diversions by pumping for irrigation above station.

REVISIONS.--WSP 2135: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	7.0	16	187	348	152	343	60	9.4	.54		0
2	0	6.4	15	177	305	154	338	55	8.6	.66		0
3	0	7.1	21	187	273	154	288	52	8.2	.42		0
4	0	16	56	201	235	157	240	53	7.4	.42		0
5	0	32	48	189	225	150	205	51	6.6	.22		0
6	0	25	43	189	209	138	171	47	5.9	.08		0
7	0	17	35	163	189	126	148	44	8.2	.08		0
8	0	13	17	148	167	114	131	41	3.2	.04		0
9	0	12	17	138	161	104	118	38	3.7	.04		0
10	3.6	13	17	134	157	137	105	36	3.4	.03		0
11	6.5	17	15	205	150	181	94	34	2.9	.03		0
12	4.8	17	15	714	159	173	87	32	2.5	.02		0
13	3.4	14	22	1,260	142	175	128	31	2.1	.02		0
14	3.4	12	20	855	137	161	100	29	1.7	.02		0
15	2.6	11	20	558	130	146	85	26	1.4	.01		0
16	2.0	11	28	1,170	118	142	79	25	.66	0		0
17	1.8	9.9	638	1,060	113	149	106	23	5.9	0		0
18	1.8	9.2	554	795	109	142	149	20	7.4	0		0
19	1.5	15	438	805	104	292	238	18	7.0	0		1.6
20	1.5	70	335	664	96	514	258	17	5.0	0		4.4
21	1.5	49	283	618	91	486	209	16	4.2	0		4.0
22	1.5	40	1,000	506	87	408	169	16	2.5	0		4.0
23	1.5	33	800	405	80	335	144	16	1.7	0		6.0
24	1.7	26	750	381	78	283	128	17	1.2	0		19
25	1.7	21	500	566	119	240	112	20	1.2	0		19
26	1.8	18	280	570	138	201	100	19	1.2	0		9.0
27	2.2	19	420	458	144	177	88	16	.94	0		6.0
28	5.0	20	420	372	137	177	78	14	.94	0		4.7
29	9.0	20	358	313	------	152	71	13	.66	0		3.6
30	7.5	18	278	340	------	163	65	13	.54	0		2.4
31	7.5	------	227	429	------	250	------	11	------	0		------
TOTAL	73.8	598.6	7,686	14,757	4,401	6,333	4,575	903	116.24	2.63	0	83.7
MEAN	2.38	20.0	248	476	157	204	153	29.1	3.87	.085	0	2.79
MAX	9.0	70	1,000	1,260	348	514	343	60	9.4	.66	0	19
MIN	0	6.4	15	134	78	104	65	11	.54	0	0	0
AC-FT	146	1,190	15,250	29,270	8,730	12,560	9,070	1,790	231	5.2	0	166

CAL YR 1972 TOTAL 102,140.23 MEAN 279 MAX 9,050 MIN 0 AC-FT 202,600
WTR YR 1973 TOTAL 39,529.97 MEAN 108 MAX 1,260 MIN 0 AC-FT 78,410

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

14312000 SOUTH UMPQUA RIVER NEAR BROCKWAY, OREG.

LOCATION.--Lat 43°08'00", long 123°23'50", in SW¼ sec.15, T.28 S., R.6 W., Douglas County, on right bank 40 ft (12 m) downstream from Winston Bridge on State Highway 99, 2.5 mi (4.0 km) northeast of Brockway, 4.2 mi (6.8 km) downstream from Lookingglass Creek, and at mile 132.8 (213.7 km).

DRAINAGE AREA.--1,670 mi^2 (4,325 km^2).

PERIOD OF RECORD.--December 1905 to June 1912, October 1923 to September 1926, January 1942 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 462.52 ft (140.976 m) above mean sea level (State Highway Department bench mark). Prior to June 24, 1949, nonrecording gage at several sites within 400 ft (122 m) of present site at various datums. June 24, 1949, to Oct. 1, 1970, at datum 461.84 ft (140.769 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--39 years (1906-11, 1923-26, 1942-73), 2,889 ft^3/s (81.8 m^3/s), 23.49 in/yr (597 mm/yr), 2,093,000 acre-ft/yr (2.58 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,600 ft^3/s (413 m^3/s) Dec. 22, gage height, 12.01 ft (3.660 m); minimum, 25 ft^3/s (0.71 m^3/s) Aug. 17, 18.

Period of record: Maximum discharge, 125,000 ft^3/s (3,540 m^3/s) Dec. 23, 1964, gage height, 34.28 ft (10.449 m); minimum, 25 ft^3/s (0.71 m^3/s) Aug. 17, 18, 1973.

Flood of Feb. 21, 1927, reached a stage of about 31.2 ft (9.51 m), present site and datum, discharge, 89,500 ft^3/s (2,530 m^3/s). Discharge for flood of February 1890, which reached a stage 1.9 ft (0.60 m) higher, according to local resident who lived nearby at time of both floods, have been found to be in error and should not be used.

REMARKS.--Records good. No regulation. Many small diversions for irrigation above station. Records of suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1248: 1946(M), 1948(M), 1951. WSP 1448: Drainage area. WRD Oreg. 1972: 1965(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	241	541	2,190	3,370	2,000	4,840	1,460	416	148	40	56
2	137	224	491	2,000	2,990	2,350	4,890	1,330	393	143	34	53
3	132	300	527	2,050	2,670	2,200	4,330	1,250	377	134	32	50
4	135	478	936	1,970	2,490	2,120	3,770	1,260	364	124	32	47
5	133	971	894	1,770	2,400	2,020	3,430	1,320	342	117	32	44
6	130	915	742	1,670	2,660	1,960	3,160	1,190	321	112	34	44
7	130	615	656	1,480	2,600	1,820	2,800	1,110	302	108	34	40
8	128	527	536	1,320	2,330	1,640	2,430	1,050	279	106	34	36
9	128	500	335	1,240	2,230	1,510	2,180	998	263	105	37	40
10	151	514	300	1,200	2,200	1,550	2,010	949	256	97	37	42
11	218	667	332	1,580	2,350	2,090	1,870	902	252	88	37	50
12	443	570	379	4,910	2,360	2,660	1,790	864	247	85	37	49
13	478	460	460	13,300	2,260	2,450	2,880	844	247	81	33	44
14	355	395	460	9,960	2,080	2,550	3,120	879	245	75	34	44
15	297	359	411	6,380	2,020	2,500	2,460	900	239	75	33	43
16	255	328	419	9,190	1,910	2,370	2,130	878	238	70	31	39
17	237	307	4,060	11,300	1,760	2,700	2,390	835	266	70	27	40
18	206	297	7,730	7,650	1,670	2,660	3,270	793	345	65	26	42
19	190	311	7,750	7,130	1,560	3,240	4,290	742	371	65	29	50
20	185	844	6,490	5,570	1,450	6,210	4,660	688	305	60	32	64
21	178	929	4,840	4,780	1,340	5,740	4,150	637	264	60	33	92
22	173	724	9,650	4,110	1,250	5,230	3,600	590	233	55	32	133
23	171	684	10,900	3,540	1,180	4,490	3,280	564	217	55	32	159
24	167	585	9,680	3,170	1,120	3,890	2,990	564	216	55	35	195
25	165	505	7,000	4,510	1,470	3,520	2,530	692	214	50	40	447
26	165	447	4,640	5,050	1,920	3,180	2,280	729	196	50	51	590
27	161	724	3,530	4,200	1,930	2,820	2,120	615	183	48	67	351
28	169	887	3,640	3,510	1,930	2,830	1,980	536	174	46	93	248
29	206	700	3,450	3,130	-------	2,650	1,800	489	157	44	76	193
30	307	615	2,850	3,050	-------	2,620	1,620	457	150	44	64	165
31	276	-------	2,460	3,610	-------	4,340	-------	432	-------	42	59	-------
TOTAL	6,345	16,623	97,089	136,520	57,500	90,750	88,950	26,547	8,072	2,477	1,247	3,490
MEAN	205	554	3,132	4,404	2,054	2,927	2,965	856	269	79.9	40.2	116
MAX	478	971	10,900	13,300	3,370	6,210	4,890	1,460	416	148	93	590
MIN	128	224	300	1,200	1,120	1,510	1,620	432	150	42	26	36
CFSM	.12	.33	1.88	2.64	1.23	1.75	1.78	.51	.16	.05	.02	.07
IN.	.14	.37	2.16	3.04	1.28	2.02	1.98	.59	.18	.06	.03	.08
AC-FT	12,590	32,970	192,600	270,800	114,100	180,000	176,400	52,660	16,010	4,910	2,470	6,920

CAL YR 1972 TOTAL 1,189,743 MEAN 3,251 MAX 55,700 MIN 67 CFSM 1.95 IN 26.50 AC-FT 2,360,000
WTR YR 1973 TOTAL 535,610 MEAN 1,467 MAX 13,300 MIN 26 CFSM .88 IN 11.93 AC-FT 1,062,000

PEAK DISCHARGE (BASE, 20,000 CFS).--No peak above base.

14312200 DEER CREEK NEAR ROSEBURG, OREG.

LOCATION.--Lat 43°13'10", long 123°16'35", in NE¼SW¼ sec.15, T.27 S., R.5 W., Douglas County, on right bank 0.6 mi (1.0 km) upstream from Shick Creek, 3.3 mi (5.3 km) east of Roseburg, and at mile 4.0 (6.4 km).

DRAINAGE AREA.--53.2 mi² (137.8 km²).

PERIOD OF RECORD.--October 1955 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 498.95 ft (152.080 m) above mean sea level (Douglas County Highway Department). Prior to July 3, 1969, nonrecording gage at site 0.5 mi (0.8 km) downstream at datum 12.85 ft (3.917 m) lower.

AVERAGE DISCHARGE.--18 years, 77.4 ft³/s (2.19 m³/s), 56,080 acre-ft/yr (69.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 465 ft³/s (13.2 m³/s) Mar. 19, gage height, 5.70 ft (1.737 m); no flow July 30 to Aug. 7.

Period of record: Maximum discharge, 7,910 ft³/s (224 m³/s) Dec. 28, 1965, gage height, 14.76 ft (4.499 m), from floodmark, from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurements at gage heights 13.38 and 13.67 ft (4.078 and 4.167 m, respectively); no flow at times.

Flood of Oct. 29, 1950, reached a stage of 13.38 ft (4.078 m), from floodmarks, discharge, 6,460 ft³/s (183 m³/s), from rating curve extended above 2,200 ft³/s (62.3 m³/s) as explained above.

REMARKS.--Records good. No regulation. Diversions above station for logponds and many small diversions by pumping for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	4.2	5.6	38	98	42	243	18	5.2	2.8	0	.42
2	2.1	4.5	6.0	52	81	35	213	17	5.6	2.4	0	.56
3	2.5	7.1	14	75	69	44	155	16	4.9	2.1	0	.20
4	2.8	13	13	75	69	52	118	18	4.9	1.5	0	.20
5	2.5	11	9.8	61	66	46	85	16	4.5	1.5	0	.20
6	2.5	7.1	7.5	54	58	41	68	14	4.2	2.4	0	.10
7	2.5	6.8	6.0	44	49	34	54	14	3.8	1.8	0	.56
8	2.1	6.3	4.5	37	43	29	46	13	3.5	2.1	.56	1.8
9	2.1	6.3	4.5	32	47	27	38	12	3.5	1.5	.56	.30
10	5.6	7.5	4.5	38	44	54	36	11	3.2	1.5	1.0	.20
11	7.1	7.1	4.5	61	40	57	31	11	3.5	1.5	1.3	.13
12	4.5	6.8	4.4	191	47	48	36	9.8	3.8	1.3	1.0	.30
13	4.9	5.6	4.4	259	37	53	164	9.4	4.5	1.0	.56	.42
14	4.5	5.2	4.4	170	36	54	91	9.4	3.8	1.0	.20	.30
15	4.2	4.9	5.5	121	48	48	68	7.9	4.2	.80	.20	.13
16	3.8	4.9	20	257	42	63	64	7.9	4.5	.56	.30	.30
17	3.5	4.9	89	203	39	84	96	7.5	5.6	.30	.56	1.0
18	3.5	4.9	78	149	34	69	123	7.1	4.9	.30	1.0	2.1
19	3.5	7.1	52	129	30	295	155	7.5	3.8	.30	1.0	3.6
20	3.2	10	44	101	27	313	142	7.1	3.2	1.0	.56	11
21	3.2	10	40	91	25	207	107	6.7	2.1	2.6	.80	19
22	3.2	11	95	72	23	146	83	6.7	2.1	2.1	1.3	29
23	3.2	9.4	100	59	20	107	65	7.5	3.5	1.0	.80	42
24	3.2	7.9	123	67	20	84	52	10	3.5	1.0	1.5	49
25	3.5	6.7	81	162	22	69	44	9.8	3.2	.56	3.6	54
26	3.8	6.7	56	144	25	56	36	7.5	3.5	.20	2.4	51
27	4.2	6.7	59	108	25	72	30	6.7	3.2	.20	1.8	52
28	5.2	6.3	69	86	26	83	26	6.3	3.2	.20	.80	59
29	6.7	6.0	64	77	------	63	23	6.0	3.2	.07	.80	66
30	4.9	6.0	52	109	------	106	21	4.9	3.2	0	.56	72
31	4.2	------	47	130	------	143	------	4.9	------	0	.56	------
TOTAL	114.8	210.3	1,167.6	3,252	1,190	2,624	2,513	310.6	115.8	35.59	23.72	516.82
MEAN	3.70	7.01	37.7	105	42.5	84.6	83.8	10.0	3.86	1.15	.77	17.2
MAX	7.1	13	123	259	98	313	243	18	5.6	2.8	3.6	72
MIN	2.1	4.2	4.4	32	20	27	21	4.9	2.1	0	0	.10
AC-FT	228	417	2,320	6,450	2,360	5,200	4,980	616	230	71	47	1,030

CAL YR 1972 TOTAL 24,212.32 MEAN 66.2 MAX 1,830 MIN .22 AC-FT 48,030
WTR YR 1973 TOTAL 12,074.23 MEAN 33.1 MAX 313 MIN 0 AC-FT 23,950

PEAK DISCHARGE (BASE, 1,200 CFS).--No peak above base.

14312400 SILENT CREEK NEAR DIAMOND LAKE, OREG.

LOCATION.--Lat 43°07'36", long 122°09'33", in T.28 S., R.6 E. (unsurveyed), Douglas County, in Umpqua National Forest, on right bank 25 ft (8 m) upstream from Summer Homes Road and 3.7 mi (6.0 km) southwest of town of Diamond Lake.

DRAINAGE AREA.--8.24 mi^2 (21.34 km^2).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,190 ft (1,580 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 44 ft^3/s (1.25 m^3/s) Dec. 21, gage height, 3.50 ft (1.067 m); minimum. 29 ft^3/s (0.82 m^3/s) Sept. 9-22, 25-30.

Period of record: Maximum discharge, 56 ft^3/s (1.59 m^3/s) June 2, 1972, gage height, 3.74 ft (1.140 m); minimum, 29 ft^3/s (0.82 m^3/s) Sept. 9-22, 25-30, 1973.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	36	34	34	33	33	32	35	33	32	31	30
2	35	36	34	34	33	33	32	36	33	32	31	30
3	35	36	34	34	33	33	32	36	33	32	31	30
4	35	37	34	34	33	32	32	36	33	32	31	30
5	35	36	34	34	33	32	32	36	32	32	30	30
6	35	35	34	34	33	32	32	35	32	32	30	30
7	35	35	34	34	33	32	32	35	32	32	30	30
8	35	35	34	34	33	32	33	35	32	32	30	30
9	36	35	34	33	33	32	33	35	32	32	30	29
10	37	35	34	33	33	33	34	35	32	32	30	29
11	37	35	34	34	33	32	34	35	32	32	30	29
12	36	35	34	36	33	32	34	35	32	32	30	29
13	37	35	34	38	33	32	34	36	32	32	30	29
14	35	35	34	35	33	32	34	37	32	32	30	29
15	35	35	34	35	33	32	34	36	32	32	30	29
16	35	35	34	35	33	32	35	36	33	32	30	29
17	35	35	36	34	33	32	34	36	33	32	30	29
18	35	35	36	34	33	32	34	35	32	32	30	29
19	35	35	38	34	32	32	33	35	32	32	30	29
20	35	34	37	34	32	32	33	34	32	32	30	29
21	35	34	40	34	33	32	34	34	32	32	30	29
22	35	34	40	34	32	32	34	34	32	32	30	29
23	35	34	37	34	32	32	34	34	32	32	30	30
24	35	34	36	34	33	32	34	36	32	31	30	32
25	35	35	35	34	33	32	35	34	32	31	30	29
26	35	36	35	33	33	32	36	33	32	31	30	29
27	35	34	35	33	33	32	35	33	32	31	30	29
28	35	34	35	33	33	32	35	33	32	31	30	29
29	35	34	34	33	------	32	35	33	32	31	30	29
30	35	34	34	33	------	32	35	33	32	31	30	29
31	35	------	34	33	------	32	------	33	------	31	30	------
TOTAL	1,093	1,048	1,086	1,055	920	996	1,010	1,079	966	984	934	882
MEAN	35.3	34.9	35.0	34.0	32.9	32.1	33.7	34.8	32.2	31.7	30.1	29.4
MAX	37	37	40	38	33	33	36	37	33	32	31	32
MIN	35	34	34	33	32	32	32	33	32	31	30	29
AC-FT	2,170	2,080	2,150	2,090	1,820	1,980	2,000	2,140	1,920	1,950	1,850	1,750

CAL YR 1972 TOTAL 13,369 MEAN 36.5 MAX 51 MIN 32 AC-FT 26,520
WTR YR 1973 TOTAL 12,053 MEAN 33.0 MAX 40 MIN 29 AC-FT 23,910

14312450 DIAMOND LAKE NEAR DIAMOND LAKE, OREG.

LOCATION.--Lat 43°08'22", long 122°08'10", T.28 S., R.6 E. (unsurveyed), Douglas County, Umpqua National Forest, at shore of lake, at mouth of Short Creek and 2.7 mi (4.3 km) south of town of Diamond Lake.

DRAINAGE AREA.--54.9 mi^3 (142.2 km^2).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,180.27 ft (1,578.946 m) above mean sea level. Gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Current year: Maximum contents, 75,960 acre-ft (93.7 hm^3) Sept. 24, elevation, 5,183.30 ft (1,579.870 m); minimum, 73,080 acre-ft (90.1 hm^3) Mar. 25, 26, elevation, 5,182.40 ft (1,579.596 m).

Period of record: Maximum contents 76,500 acre-ft (94.3 hm^3) Mar. 2, 1972, elevation, 5,183.47 ft (1,579.922 m); minimum, 73,020 acre-ft (90.0 hm^3) Nov. 9, elevation, 5,182.38 ft (1,579.589 m).

REMARKS.--Records good. Lake regulated by flash boards at outlet (Lake Creek). Flash boards are removed each fall and replaced after runoff each summer. Insignificant diversion from tributary streams for domestic use.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,182.91	5,182.54	5,182.48			5,182.50	5,182.60	5,183.08	5,183.08	5,183.11	5,183.04	5,182.97
2	5,182.89	5,182.52	5,182.47			5,182.48	5,182.60	5,183.08	5,183.07	5,183.10	5,183.03	5,182.97
3	5,182.87	5,182.58	5,182.48			5,182.47	5,182.62	5,183.08	5,183.05	5,183.11	5,183.02	5,182.98
4	5,182.85	5,182.63	5,182.47			5,182.45	5,182.63	5,183.11	5,183.05	5,183.11	5,183.02	5,182.98
5	5,182.83	5,182.59	5,182.51			5,182.44	5,182.65	5,183.10	5,183.04	5,183.10	5,183.01	5,183.00
6	5,182.82	5,182.58	5,182.54			5,182.44	5,182.67	5,183.10	5,183.03	5,183.10	5,183.01	5,183.00
7	5,182.80	5,182.57	5,182.53			5,182.44	5,182.69	5,183.09	5,183.03	5,183.08	5,183.00	5,183.02
8	5,182.79	5,182.55				5,182.43	5,182.71	5,183.10	5,183.04	5,183.07	5,183.00	5,183.02
9	5,182.80	5,182.54				5,182.42	5,182.72	5,183.09	5,183.04	5,183.08	5,182.99	5,183.02
10	5,182.85	5,182.53				5,182.47	5,182.74	5,183.09	5,183.04	5,183.08	5,182.99	5,183.01
11	5,182.88	5,182.52				5,182.46	5,182.76	5,183.09	5,183.04	5,183.07	5,182.99	5,183.02
12	5,182.88	5,182.50				5,182.46	5,182.81	5,183.09	5,183.04	5,183.06	5,182.99	5,183.02
13	5,182.87	5,182.48				5,182.47	5,182.87	5,183.09	5,183.06	5,183.05	5,182.99	5,183.02
14	5,182.86	5,182.47				5,182.46	5,182.88	5,183.09	5,183.05	5,183.05	5,182.99	5,183.01
15	5,182.82	5,182.46				5,182.45	5,182.89	5,183.11	5,183.04	5,183.05	5,182.98	5,183.01
16	5,182.80	5,182.45				5,182.48	5,182.95	5,183.10	5,183.09	5,183.05	5,182.98	5,183.00
17	5,182.78	5,182.44				5,182.46	5,182.99	5,183.10	5,183.11	5,183.05	5,182.97	5,183.00
18	5,182.75	5,182.45				5,182.46	5,183.03	5,183.09	5,183.11	5,183.05	5,182.97	5,183.00
19	5,182.73	5,182.50				5,182.45	5,183.04	5,183.09	5,183.11	5,183.06	5,182.96	5,183.06
20	5,182.71	5,182.49				5,182.45	5,183.05	5,183.07	5,183.11	5,183.06	5,182.96	5,183.08
21	5,182.68	5,182.50				5,182.45	5,183.05	5,183.06	5,183.11	5,183.05	5,182.95	5,183.09
22	5,182.66	5,182.49				5,182.45	5,183.06	5,183.05	5,183.12	5,183.04	5,182.95	5,183.14
23	5,182.64	5,182.48				5,182.43	5,183.06	5,183.09	5,183.12	5,183.04	5,182.95	5,183.17
24	5,182.61	5,182.47				5,182.42	5,183.05	5,183.17	5,183.12	5,183.04	5,182.97	5,183.27
25	5,182.61	5,182.52				5,182.40	5,183.05	5,183.14	5,183.12	5,183.04	5,182.97	5,183.25
26	5,182.56	5,182.50				5,182.40	5,183.07	5,183.14	5,183.14	5,183.04	5,182.97	5,183.24
27	5,182.54	5,182.50	5,182.97			5,182.43	5,183.07	5,183.13	5,183.15	5,183.05	5,182.97	5,183.24
28	5,182.58	5,182.50			5,182.48	5,182.45	5,183.07	5,183.12	5,183.15	5,183.05	5,182.97	5,183.23
29	5,182.55	5,182.50			------	5,182.47	5,183.08	5,183.12	5,183.14	5,183.05	5,182.98	5,183.21
30	5,182.54	5,182.49			------	5,182.53	5,183.08	5,183.12	5,183.12	5,183.04	5,182.99	5,183.19
31	5,182.52	------			------	5,182.57	------	5,183.11	------	5,183.04	5,182.98	------
MEAN	5,182.74	5,182.51				5,182.46	5,182.88	5,183.10	5,183.08	5,183.06	5,182.99	5,183.07
MAX	5,182.91	5,182.63				5,182.57	5,183.08	5,183.17	5,183.15	5,183.11	5,183.04	5,183.27
MIN	5,182.52	5,182.44				5,182.40	5,182.60	5,183.05	5,183.03	5,183.04	5,182.95	5,182.97
(†)	73,460	73,370	74,900	a73,990	73,340	73,620	75,260	75,350	75,380	75,130	74,940	75,610
(‡)	-1,250	-90	+1,530	-910	-630	+280	+1,640	+90	+30	-250	-190	+670

† Change in acre-feet, at end of month.
‡ Change in contents, in acre-feet.
a Interpolated.
NOTE.--No gage-height record Dec. 8-26, Dec. 28 to Feb. 27.

14312500 LAKE CREEK NEAR DIAMOND LAKE, OREG.

LOCATION.--Lat 43°11'10", long 122°09'55", in NW¼SW¼ sec.30, T.27 S., R.6 E., Douglas County, Umpqua National Forest, on right bank 260 ft (79 m) downstream from outlet of Diamond Lake, 1.6 mi (2.6 km) northwest of town of Diamond Lake, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--54.9 mi^2 (142.2 km^2).

PERIOD OF RECORD.--May 1922 to September 1925 (no winter records), October 1926 to September 1929, April, July, August 1930, October 1930 to September 1953, October 1971 to current year. Prior to October 1971 published as "at Diamond Lake, near Fork Klamath."

GAGE.--Water-stage recorder. Altitude of gage is 5,180 ft (1,580 m), from river-profile map. Prior to May 26, 1931, nonrecording gage at site 300 ft (91 m) downstream at different datum. May 26, 1931, to Oct. 6, 1933, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--28 years (1926-29. 1930-53, 1971-73), 55.6 ft^3/s (1.57 m^3/s), 40,280 acre-ft/yr (49.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 121 ft^3/s (3.43 m^3/s) Dec. 23, gage height, 1.54 ft (0.469 m); minimum, 15 ft^3/s (0.42 m^3/s) Aug. 22, 23.

Period of record: Maximum discharge observed, 336 ft^3/s (9.52 m^3/s) Jan. 1, 1943, gage height, 2.8 ft (0.85 m), from rating curve extended above 120 ft^3/s (3.40 m^3/s); no flow Aug. 25-27, 1931.

REMARKS.--Records fair. Flow regulated by gates and fish racks at lake outlet. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	78	72	103	94	76	31	55	53	31	24	18
2	70	78	72	100	92	75	32	55	50	31	23	18
3	67	78	74	98	90	75	33	55	48	30	23	16
4	65	78	72	96	90	74	34	56	47	29	22	17
5	64	78	71	94	90	74	31	57	46	30	22	17
6	62	79	76	94	87	73	24	56	46	29	21	18
7	62	81	76	92	87	72	24	56	45	29	21	20
8	51	81	74	90	85	72	25	57	44	30	20	22
9	52	81	74	90	83	71	25	55	44	28	19	22
10	64	81	72	87	83	74	26	55	43	28	19	23
11	76	79	72	92	81	74	27	55	43	28	19	24
12	87	79	72	103	83	73	29	53	42	27	19	24
13	96	79	72	110	83	74	33	54	41	27	9	24
14	98	76	71	110	83	73	34	54	41	27	19	24
15	98	77	71	110	81	72	35	55	40	27	19	24
16	94	74	72	116	81	72	37	55	40	27	19	24
17	90	74	83	116	79	74	41	54	39	27	18	24
18	87	76	87	113	79	73	43	54	38	26	18	25
19	85	77	94	113	77	72	46	53	38	27	17	27
20	83	77	96	110	76	72	46	52	37	27	17	28
21	83	76	100	108	76	72	47	51	36	26	17	29
22	81	76	113	105	74	72	47	49	36	25	16	33
23	79	74	118	103	74	71	51	52	35	25	16	38
24	77	72	118	103	74	70	57	57	34	25	17	45
25	75	76	118	105	74	69	58	57	34	25	17	48
26	76	76	113	103	72	52	56	56	33	25	17	49
27	76	76	113	100	72	22	56	56	33	25	17	46
28	76	76	113	98	72	23	56	55	32	25	18	59
29	76	74	110	96	------	24	56	57	32	25	18	78
30	76	74	108	94	------	26	56	56	31	25	18	74
31	78	------	103	96	------	29	------	55	------	24	18	------
TOTAL	2,396	2,311	2,750	3,148	2,272	1,995	1,196	1,697	1,201	840	587	938
MEAN	77.3	77.0	88.7	102	81.1	64.4	39.9	54.7	40.0	27.1	18.9	31.3
MAX	98	81	118	116	94	76	58	57	53	31	24	78
MIN	61	72	71	87	72	22	24	49	31	24	16	16
AC-FT	4,750	4,580	5,450	6,240	4,510	3,960	2,370	3,370	2,380	1,670	1,160	1,860

CAL YR 1972 TOTAL 30,573 MEAN 83.5 MAX 153 MIN 14 AC-FT 60,640
WTR YR 1973 TOTAL 21,331 MEAN 58.4 MAX 118 MIN 16 AC-FT 42,310

14313000 LEMOLO LAKE NEAR TOKETEE FALLS, OREG.

LOCATION.--Lat 43°19'10", long 122°11'20", in SE¼NW¼ sec.11, T.26 S., R.5 E., Douglas County, at Lemolo No. 1 diversion dam on North Umpqua River, 0.8 mi (1.3 km) downstream from Lake Creek, 13.0 mi (20.9 km) east of town of Toketee Falls, and at mile 93.01 (149.7 km).

DRAINAGE AREA.--170 mi² (440 km²).

PERIOD OF RECORD.--July 1954 to current year. Prior to October 1960, published as Lemolo Reservoir near Toketee Falls.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Pacific Power & Light Co.).

EXTREMES.--Current year: Maximum contents observed, 13,610 acre-ft (16.8 hm³) July 23, elevation, 4,148.6 ft (1,264.49 m); minimum observed, 1,260 acre-ft (1.55 hm³) Jan. 15, elevation, 4,099.7 ft (1,249.59 m).
Period of record: Maximum contents observed, 14,000 acre-ft (17.3 hm³) Dec. 24, 1964, elevation, 4,149.5 ft (1,264.77 m); minimum observed, 11 acre-ft (13,600 m³) Mar. 5, 1955, elevation, 4,055.4 ft (1,236.09 m).

REMARKS.--Lake is formed by Lemolo No. 1 diversion dam. Storage began July 15, 1954. Usable capacity for normal operation, 12,520 acre-ft (15.4 hm³) between elevations 4,097.0 ft (1,248.77 m) and 4,148.5 ft (1,264.46 m). Dead storage below 4,097.0 ft (1,248.77 m), 1,040 acre-ft (1.28 hm³). Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Gage readings furnished by Pacific Power & Light Co.

MONTHEND ELEVATION AND CONTENTS AT 0900, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	4,146.2	12,600	-
Oct. 31	4,138.8	9,820	-2,780
Nov. 30	4,124.7	5,470	-4,350
Dec. 31	4,120.1	4,280	-1,190
CAL YR 1972	-	-	+1,020
Jan. 31	4,114.1	3,020	-1,260
Feb. 28	4,110.4	2,440	-580
Mar. 31	4,102.8	1,540	-900
Apr. 30	4,141.3	10,710	+9,170
May 31	4,144.3	11,850	+1,140
June 30	4,141.5	10,780	-1,070
July 31	4,145.8	12,440	+1,660
Aug. 31	4,148.0	13,350	+910
Sept.30	4,146.8	12,850	-500
WTR YR 1973	-	-	+250

14313500 NORTH UMPQUA RIVER BELOW LEMOLO LAKE, NEAR TOKETEE FALLS, OREG.

LOCATION.--Lat 43°19'20", long 122°11'40", in NW¼NW¼ sec.11, T.26 S., R.5 E., Douglas County, on right bank 0.4 mi (0.6 km) downstream from Lemolo Lake, 13 mi (21 km) east of town of Toketee Falls, and at mile 92.6 (148.9 km).

DRAINAGE AREA.--170 mi² (440 km²).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Published as "below Lake Creek" prior to October 1952, as "below Lake Creek, near Toketee Falls" October 1952 to September 1953, and as "below Lemolo Reservoir near Toketee Falls" October 1953 to September 1960.

GAGE.--Water-stage recorder. Altitude of gage is 4,025 ft (1,227 m), from river-profile map. Prior to July 15, 1954, at site 1 mi (2 km) upstream at datum about 65 ft (19.8 m) higher. July 15, 1954, to Sept. 25, 1955, at site 400 ft (122 m) upstream at datum 14.11 ft (4.301 m) higher.

AVERAGE DISCHARGE.--45 years, 420 ft³/s (11.9 m³/s), 33.55 in/yr (852 mm/yr), 304,300 acre-ft/yr (375 hm³/yr), adjusted for storage.

EXTREMES (River only).--Current year: Maximum discharge, 193 ft³/s (5.47 m³/s) Dec. 6, gage height, 5.24 ft (1.597 m); minimum, 17 ft³/s (0.48 m³/s) Nov. 27-29.

Period of record: Maximum discharge, 4,600 ft³/s (130 m³/s) Dec. 25, 1964, from rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement of peak flow, gage height, 9.20 ft (2.804 m), from floodmark; minimum, 6.4 ft³/s (0.18 m³/s) July 17, 1954.

(Combined flow).--Current year: Maximum daily discharge, 715 ft³/s (20.2 m³/s) Dec. 6; minimum daily, 19 ft³/s (0.54 m³/s) Apr. 19, 20.

Period of record: Maximum discharge, 4,680 ft³/s (133 m³/s) Dec. 25, 1964, from river rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 9.7 ft³/s (0.27 m³/s) May 13, 1955.

REMARKS.--Records good. Flow regulated since 1954 by Lemolo Lake (see station 14313000); also slightly regulated by Diamond Lake. All records given herein include flow in Lemolo No. 1 power canal which, beginning July 1955, diverts 0.4 mi (0.6 km) above station for power generation with return flow 4.3 mi (6.9 km) downstream.

REVISIONS.--WSP 1448: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	389	545	287	535	544	350	340	332	543	366	448	371
2	528	543	20	532	519	419	414	267	542	202	397	372
3	531	508	306	535	420	417	389	316	543	191	342	370
4	536	544	551	536	410	420	383	230	553	192	337	328
5	532	542	629	541	427	418	353	262	551	149	336	315
6	534	543	715	541	533	421	374	268	554	203	344	334
7	531	542	656	540	534	386	376	336	550	227	335	337
8	528	543	621	539	541	418	296	396	517	229	330	334
9	528	543	653	534	434	424	354	471	501	228	330	303
10	531	539	627	533	398	391	359	465	402	238	314	331
11	536	540	640	531	393	411	347	514	395	247	321	332
12	446	537	613	238	420	417	299	514	263	248	330	308
13	533	539	527	116	432	409	218	511	235	324	371	390
14	534	540	526	245	437	436	344	448	223	352	313	331
15	537	538	528	432	441	452	232	522	205	389	259	224
16	542	542	526	346	440	450	101	521	110	339	417	225
17	539	539	309	440	440	447	27	519	111	428	386	382
18	539	543	438	500	439	450	21	521	282	384	380	393
19	537	544	470	440	385	445	19	415	274	331	283	383
20	541	543	392	513	448	451	19	451	416	290	280	387
21	541	546	427	533	366	469	20	431	429	321	215	296
22	539	546	261	537	417	447	21	545	366	227	222	205
23	546	546	458	535	418	452	22	545	369	418	271	208
24	547	541	462	532	418	452	23	544	333	394	232	334
25	545	539	505	530	418	453	24	543	450	373	233	555
26	546	540	532	535	418	452	241	546	461	374	255	527
27	542	538	525	541	420	440	528	557	563	410	250	353
28	541	538	515	543	418	397	514	556	561	449	260	356
29	563	539	539	544	------	312	498	552	562	445	205	357
30	549	542	535	539	------	336	245	442	566	444	264	357
31	544	------	531	531	------	339	------	547	------	438	370	------
TOTAL	16,455	16,212	15,324	15,067	12,328	12,981	7,401	14,087	12,430	9,850	9,630	10,298
MEAN	531	540	494	486	440	419	247	454	414	318	311	343
MAX	563	546	715	544	544	469	528	557	566	449	448	555
MIN	389	508	20	116	366	312	19	230	110	149	205	205
AC-FT	32,640	32,160	30,400	29,890	24,450	25,750	14,680	27,940	24,650	19,540	19,100	20,430
MEAN†	486	467	475	466	430	404	401	473	396	345	325	335
CFSM†	2.86	2.75	2.79	2.74	2.53	2.38	2.36	2.78	2.33	2.03	1.91	1.97
IN.†	3.29	3.07	3.22	3.16	2.63	2.74	2.63	3.21	2.60	2.34	2.21	2.20
AC-FT†	29,860	27,810	29.210	28,630	23.870	24,850	23,850	29,080	23,580	21,200	20,010	19,930

CAL YR 1972 TOTAL 214,570 MEAN 586 MAX 1,270 MIN 20 AC-FT 425,600 MEAN† 589 CFSM† 3.46 IN.† 47.06 AC-FT† 426,620
WTR YR 1973 TOTAL 152,063 MEAN 417 MAX 715 MIN 19 AC-FT 301,600 MEAN† 417 CFSM† 2.45 IN.† 33.30 AC-FT† 301,850

† Adjusted for change in contents in Lemolo Lake.

14314500 CLEARWATER RIVER ABOVE TRAP CREEK, NEAR TOKETEE FALLS, OREG.

LOCATION.--Lat 43°14'40", long 122°17'10", in SW¼ sec.1, T.27 S., R.4 E., Douglas County, on right bank 900 ft (274 m) downstream from Clearwater No. 1 diversion dam, 0.4 mi (0.6 km) upstream from Trap Creek, 8.7 mi (14.0 km) east of town of Toketee Falls, and at mile 7.8 (12.6 km).

DRAINAGE AREA.--41.6 mi^2 (107.7 km^2).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Monthly discharge only December 1927 to March 1928, published in WSP 1318. Prior to October 1952, published as "above Trap Creek."

GAGE.--Water-stage recorder. Datum of gage is 3,862.84 ft (1,177.394 m) above mean sea level (levels by Pacific Power & Light Co.). Prior to Dec. 1, 1953, at two sites about 0.4 mi (0.6 km) downstream at different datums.

AVERAGE DISCHARGE.--45 years, 171 ft^3/s (4.84 m^3/s), 55.82 in/yr (1,418 mm/yr), 123,900 acre-ft/yr (153 hm^3/yr).

EXTREMES (River only).--Current year: Maximum discharge, 220 ft^3/s (6.23 m^3/s) May 17, gage height, 4.63 ft (1.411 m); minimum, 2.8 ft^3/s (0.079 m^3/s) June 13.

Period of record: Maximum discharge, 848 ft^3/s (24.0 m^3/s) Dec. 23, 1964, gage height, 7.19 ft (2.192 m); maximum gage height, 7.87 ft (2.399 m) Dec. 23, 1964, log jam; minimum discharge, 0.10 ft^3/s (0.003 m^3/s) Jan. 8-14, 19-21, 1954.

(Combined flow).--Current year: Maximum discharge, 382 ft^3/s (10.8 m^3/s) Dec. 18; minimum daily, 154 ft^3/s (4.36 m^3/s) many days in August and September.

Period of record: Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Dec. 23, 1964; minimum daily, 91 ft^3/s (2.58 m^3/s) Nov. 4-6, 1931.

REMARKS.--Records good. All records given herein include flow in Clearwater No. 1 power canal, completed in June 1953, which diverts 900 ft (274 m) above station for generation of power and returns water to Clearwater River 2.5 mi (4.0 km) below station.

REVISIONS.--WSP 1124: Drainage area.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	206	189	192	189	190	188	204	192	166	156	155
2	198	200	189	193	189	187	187	205	188	165	155	154
3	198	202	192	192	188	187	187	208	187	164	155	154
4	198	208	190	188	188	187	187	209	185	164	155	154
5	198	202	189	190	189	187	188	205	184	163	155	154
6	198	198	193	190	188	187	189	206	184	163	155	154
7	198	198	193	187	187	187	188	205	184	163	155	156
8	198	196	191	187	187	187	189	206	182	163	154	155
9	199	196	193	190	187	187	189	206	182	163	154	154
10	205	195	195	190	187	193	191	204	179	162	154	154
11	210	194	196	191	187	190	192	204	177	162	154	154
12	204	192	200	211	187	188	195	207	177	161	154	154
13	208	192	199	221	186	188	201	213	177	161	154	154
14	204	192	200	212	186	187	198	211	177	160	154	155
15	202	190	201	208	185	187	198	206	177	159	154	155
16	200	190	204	219	184	188	200	209	179	159	154	154
17	199	189	231	208	186	188	204	210	184	159	154	155
18	200	188	304	205	184	187	201	208	180	159	154	156
19	198	190	240	201	184	188	200	199	178	159	154	158
20	198	187	230	200	184	187	198	192	177	159	154	161
21	198	188	239	198	184	187	198	205	177	158	154	158
22	198	187	259	196	184	187	199	200	176	158	154	159
23	198	187	236	194	184	186	198	196	175	157	154	164
24	198	186	224	194	185	187	199	225	173	157	156	173
25	198	188	212	194	186	187	200	211	171	157	156	167
26	198	198	207	191	186	187	203	196	170	156	156	159
27	198	192	206	193	186	187	208	196	168	156	156	156
28	199	190	202	191	187	187	208	194	167	156	156	154
29	192	190	198	190	------	187	206	194	166	156	156	154
30	173	189	197	190	------	189	205	196	166	156	155	154
31	175	------	194	190	------	188	------	194	------	156	156	------
TOTAL	6.136	5.800	6.493	6.096	5.214	5.816	5.894	6.324	5.339	4.957	4.797	4.698
MEAN	198	193	209	197	186	188	196	204	178	160	155	157
MAX	210	208	304	221	189	193	208	225	192	166	156	173
MIN	173	186	189	187	184	186	187	192	166	156	154	154
CFSM	4.76	4.64	5.02	4.74	4.47	4.52	4.71	4.90	4.28	3.85	3.73	3.77
IN.	5.49	5.19	5.81	5.45	4.66	5.20	5.27	5.66	4.77	4.43	4.29	4.20
AC-FT	12.170	11.500	12.880	12.090	10.340	11.540	11.690	12.540	10.590	9.830	9.510	9.320

CAL YR 1972 TOTAL 87.625 MEAN 239 MAX 385 MIN 173 CFSM 5.75 IN 78.36 AC-FT 173.800
WTR YR 1973 TOTAL 67.564 MEAN 185 MAX 304 MIN 154 CFSM 4.45 IN 60.42 AC-FT 134.000

14316000 FISH CREEK AT BIG CAMAS RANGER STATION, NEAR TOKETEE FALLS, OREG.

LOCATION.--Lat 43°13'50", long 122°26'45", in SE¼ sec.10, T.27 S., R.3 E., Douglas County, on right bank 0.2 mi (0.3 km) upstream from Camas Creek, 0.7 mi (1.1 km) east of Big Camas ranger station, 3.2 mi (5.1 km) south of town of Toketee Falls, and at mile 4.7 (7.6 km).

DRAINAGE AREA.--68.8 mi² (178.2 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1952, published as "at Big Camas ranger station."

GAGE.--Water-stage recorder. Datum of gage is 2,858.52 ft (871.277 m) above mean sea level (levels by Pacific Power & Light Co.). Prior to July 10, 1951, water-stage recorder and July 10 to Aug. 10, 1951, nonrecording gage, at site 1,000 ft (305 m) upstream at datum 13.72 ft (4.182 m) higher. Aug. 11 to Nov. 3, 1951, nonrecording gage at site 200 ft (61 m) downstream at different datum. Nov. 4, 1951, to Sept. 30, 1956, water-stage recorder at present site at datum 1.92 ft (0.585 m) higher.

AVERAGE DISCHARGE.--26 years, 240 ft³/s (6.80 m³/s), 47.37 in/yr (1,203 mm/yr), 173,900 acre-ft/yr (214 hm³/yr).

EXTREMES (River only).--Current year: Maximum discharge, 655 ft³/s (18.5 m³/s) Dec. 21, gage height, 5.01 ft (1.527 m); minimum, 4.6 ft³/s (0.13 m³/s) Sept. 21.

Period of record: Maximum discharge, 12,100 ft³/s (343 m³/s) Dec. 22, 1964, gage height, 13.9 ft (4.24 m), from floodmark; minimum, 2.3 ft³/s (0.06 m³/s) Sept. 25, 1957.

(Combined flow).--Current year: Maximum discharge, 809 ft³/s (22.9 m³/s) Dec. 21; minimum daily, 35 ft³/s (0.99 m³/s) Sept. 13, 14, 17.

Period of record: Maximum discharge, 12,100 ft³/s (343 m³/s) Dec. 22, 1964; minimum daily, 35 ft³/s (0.99 m³/s) Nov. 27, 1952, Sept. 13, 14, 17, 1973.

REMARKS.--Records good. All records given herein include flow in Fish Creek power canal (diversion began June 18, 1952), which diverts water 2 mi (3 km) above station for power generation at Fish Creek powerplant; diversion discharged to North Umpqua River 500 ft (183 m) downstream from Toketee powerplant.

REVISIONS.--WSP 1448: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	73	77	157	126	200	123	242	152	75	49	39
2	58	85	77	152	124	178	122	246	146	74	50	38
3	58	93	79	142	122	171	119	261	138	73	49	38
4	57	140	74	123	123	164	124	264	131	70	48	38
5	57	116	91	157	134	154	136	245	127	68	48	37
6	55	86	97	127	138	151	148	244	121	69	41	37
7	56	77	97	144	134	144	148	239	118	68	43	43
8	55	81	94	141	131	139	149	245	114	67	43	40
9	56	77	93	128	132	136	159	244	111	65	42	38
10	84	79	93	124	143	184	175	234	107	64	39	36
11	118	73	92	144	142	178	192	229	103	63	39	36
12	89	67	92	426	141	164	221	252	101	62	41	36
13	100	69	87	634	135	158	271	302	100	61	40	35
14	72	64	117	524	136	149	249	350	98	60	40	35
15	65	63	122	427	133	143	236	357	102	60	40	36
16	63	67	130	494	130	143	270	350	114	59	39	36
17	67	65	275	406	137	137	328	345	135	59	39	35
18	63	66	380	347	131	134	268	315	127	57	40	37
19	57	69	555	289	128	137	245	277	115	57	39	44
20	56	67	457	253	125	131	228	243	101	58	39	63
21	57	69	535	228	122	131	220	215	96	57	39	43
22	57	69	723	204	119	126	230	200	99	56	39	51
23	56	68	591	190	117	122	240	198	98	56	39	85
24	55	65	510	181	123	123	242	293	91	55	41	139
25	55	66	376	173	144	127	252	250	90	54	42	96
26	54	130	299	154	147	128	287	212	87	53	41	56
27	55	117	271	152	160	127	319	191	82	53	40	49
28	58	97	237	145	163	125	300	179	81	52	38	46
29	52	89	206	141	------	120	270	173	79	52	41	42
30	51	81	186	141	------	123	251	169	77	51	40	43
31	47	------	169	132	------	128	------	164	------	51	41	------
TOTAL	1,942	2,428	7,282	7,180	3,740	4,475	6,522	7,728	3,241	1,879	1,289	1,427
MEAN	62.6	80.9	235	232	134	144	217	249	108	60.6	41.6	47.6
MAX	118	140	723	634	163	200	328	357	152	75	50	139
MIN	47	63	74	123	117	120	119	164	77	51	38	35
CFSM	.91	1.18	3.42	3.37	1.95	2.09	3.15	3.62	1.57	.88	.60	.69
IN.	1.05	1.31	3.94	3.88	2.02	2.42	3.53	4.18	1.75	1.02	.70	.77
AC-FT	3,850	4,820	14,440	14,240	7,420	8,880	12,940	15,330	6,430	3,730	2,560	2,830

CAL YR 1972 TOTAL 113,647 MEAN 311 MAX 3,030 MIN 47 CFSM 4.52 IN 61.45 AC-FT 225,400
WTR YR 1973 TOTAL 49,133 MEAN 135 MAX 723 MIN 35 CFSM 1.96 IN 26.57 AC-FT 97,460

PEAK DISCHARGE (BASE, 900 CFS).--No peak above base.

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OREG.

LOCATION.--Lat 43°17'45", long 122°32'10", in NW¼ sec.24, T.26 S., R.2 E., Douglas County, on right bank 0.6 mi (1.0 km) upstream from Copeland Creek, 4.7 mi (7.6 km) west of town of Toketee Falls, and at mile 67.2 (108.1 km).

DRAINAGE AREA.--475 mi^2 (1,230 km^2).

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only September 1949, published in WSP 1318. Prior to October 1952, published as "above Copeland Creek."

GAGE.--Water-stage recorder. Altitude of gage is 1,580 ft (482 m), from river-profile map.

AVERAGE DISCHARGE.--24 years, 1,531 ft^3/s (43.4 m^3/s), 1,109,000 acre-ft/yr (1.37 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,230 ft^3/s (91.5 m^3/s) Dec. 22, gage height, 7.74 ft (2.359 m); minimum, 547 ft^3/s (15.5 m^3/s) Aug. 15; minimum daily, 655 ft^3/s (18.5 m^3/s) Sept. 16.

Period of record: Maximum discharge, 40,700 ft^3/s (1,150 m^3/s) Dec. 22, 1964, gage height, 19.1 ft (5.82 m), from floodmark, from rating curve extended above 7,200 ft^3/s (204 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 565 ft^3/s (16.0 m^3/s) Sept. 13, 1959.

REMARKS.--Records excellent. Considerable fluctuation caused by powerplants upstream; flow slightly regulated by Diamond Lake and by Lemolo Lake (see station 14313000). No diversion above station.

REVISIONS (WATER YEARS).--WSP 1448: 1953(M), 1954, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	958	1.140	904	1.440	1.330	1.360	1.180	1.320	1.230	826	886	793
2	1.110	1.300	738	1.410	1.260	1.280	1.230	1.310	1.230	749	832	765
3	1.090	1.230	880	1.400	1.250	1.310	1.230	1.320	1.170	727	754	743
4	1.090	1.300	1.230	1.320	1.170	1.300	1.250	1.330	1.200	760	765	690
5	1.210	1.360	1.130	1.300	1.340	1.280	1.270	1.290	1.200	705	765	771
6	1.150	1.250	1.240	1.270	1.360	1.250	1.280	1.300	1.170	660	754	776
7	1.140	1.250	1.380	1.250	1.380	1.200	1.350	1.330	1.220	754	754	727
8	1.020	1.200	1.170	1.290	1.300	1.200	1.210	1.400	1.080	765	832	716
9	1.140	1.170	1.190	1.250	1.270	1.200	1.210	1.440	1.040	721	749	721
10	1.130	1.160	1.030	1.230	1.230	1.410	1.230	1.440	1.020	721	743	749
11	1.320	1.130	1.160	1.310	1.260	1.500	1.270	1.520	1.050	776	771	749
12	1.260	1.140	1.200	2.020	1.330	1.430	1.390	1.450	886	760	760	727
13	1.220	1.140	1.180	2.790	1.250	1.390	1.500	1.460	832	815	826	749
14	1.200	1.140	1.160	2.410	1.270	1.320	1.380	1.590	820	874	727	732
15	1.140	1.150	1.050	2.140	1.250	1.340	1.490	1.570	716	815	665	665
16	1.130	1.140	1.120	2.270	1.200	1.330	1.100	1.650	685	844	771	655
17	1.140	1.100	1.850	2.110	1.240	1.390	1.420	1.610	838	892	820	710
18	1.120	1.130	1.900	1.970	1.270	1.270	1.330	1.650	952	809	862	765
19	1.130	1.160	2.340	1.710	1.200	1.320	1.220	1.410	922	754	685	793
20	1.080	1.160	2.420	1.670	1.190	1.310	1.230	1.270	934	815	670	815
21	1.140	1.180	2.240	1.650	1.120	1.360	1.170	1.390	1.020	771	665	710
22	1.110	1.160	3.080	1.570	1.160	1.320	1.190	1.370	964	710	665	765
23	1.110	1.160	2.700	1.530	1.160	1.280	1.260	1.340	898	820	660	680
24	1.110	1.110	2.730	1.460	1.160	1.280	1.340	1.430	892	880	665	868
25	1.130	1.170	2.140	1.450	1.160	1.290	1.300	1.460	946	771	670	1.180
26	1.120	1.340	1.890	1.430	1.200	1.270	1.320	1.500	1.050	776	660	1.050
27	1.130	1.330	1.730	1.400	1.280	1.280	1.710	1.250	1.050	892	665	832
28	1.130	1.290	1.760	1.390	1.230	1.250	1.640	1.270	1.140	904	665	765
29	1.120	1.190	1.570	1.390	-------	1.170	1.690	1.270	1.050	856	665	771
30	1.140	1.100	1.510	1.370	-------	1.140	1.380	1.220	1.040	856	660	771
31	1.100	-------	1.480	1.390	-------	1.210	-------	1.290	-------	880	787	-------
TOTAL	35.118	35.780	49.102	49.590	34.820	40.240	39.770	43.450	30.245	24.658	22.818	23.203
MEAN	1.133	1.193	1.584	1.600	1.244	1.298	1.326	1.402	1.008	795	736	773
MAX	1.320	1.360	3.080	2.790	1.380	1.500	1.710	1.650	1.230	904	886	1.180
MIN	958	1.100	738	1.230	1.120	1.140	1.100	1.220	685	660	660	655
AC-FT	69.660	70.970	97.390	98.360	69.070	79.820	78.880	86.180	59.990	48.910	45.260	46.020

CAL YR 1972 TOTAL 728.410 MEAN 1.990 MAX 9.550 MIN 738 AC-FT 1.445.000
WTR YR 1973 TOTAL 428.794 MEAN 1.175 MAX 3.080 MIN 655 AC-FT 850.500

14316700 STEAMBOAT CREEK NEAR GLIDE, OREG.

LOCATION.--Lat 43°21'00", long 122°43'40", in N½ sec.32, T.25½ S., R.1 E., Douglas County, in Umpqua National Forest, on right bank in Canton Creek Forest Service Park, 200 ft (61 m) downstream from Canton Creek, 19 mi (31 km) northeast of Glide, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--277 mi² (717 km²).

PERIOD OF RECORD.--Annual maximum, water year 1956, June 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,128.55 ft (343.982 m) above mean sea level (levels by Bureau of Public Roads). Oct. 7, 1955, to June 13, 1956, nonrecording gage at site 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--17 years, 730 ft³/s (20.7 m³/s), 43.67 in/yr (1,109 mm/yr), 528,900 acre-ft/yr (652 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,920 ft³/s (168 m³/s) Dec. 17, gage height, 7.89 ft (2.405 m); minimum, 30 ft³/s (0.85 m³/s) Sept. 15-17.

Period of record: Maximum discharge, 51,000 ft³/s (1,440 m³/s) Dec. 22, 1964, gage height, 25.6 ft (7.80 m), from floodmark, from rating curve extended above 13,000 ft³/s (368 m³/s), on basis of slope-area measurement at 17.96 ft (5.474 m); minimum, 30 ft³/s (0.85 m³/s) Sept. 15-17, 1973.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	114	235	614	751	674	1.000	430	138	70	42	34
2	51	291	209	653	672	684	915	408	128	70	42	34
3	51	332	435	657	645	606	850	401	122	68	40	33
4	49	947	380	561	679	606	800	429	114	67	40	33
5	48	841	284	500	791	612	800	390	107	67	40	32
6	46	397	255	441	831	598	800	363	103	65	40	32
7	46	262	196	390	707	563	700	342	101	63	40	39
8	46	228	120	357	601	560	600	332	96	65	39	43
9	49	212	120	339	563	531	550	317	92	63	39	39
10	158	431	110	336	565	1.330	500	297	92	61	39	36
11	348	372	110	705	563	1.500	480	280	88	61	39	34
12	215	238	105	4.010	546	1.050	480	284	88	59	37	32
13	336	181	100	4.660	513	884	700	317	94	58	37	32
14	280	147	100	2.770	488	815	550	339	88	58	36	32
15	158	122	110	1.650	471	755	480	323	92	56	36	30
16	117	105	313	1.780	443	776	550	300	101	54	34	30
17	105	94	4.260	1.860	453	816	900	278	187	54	34	30
18	90	96	3.260	1.390	447	740	1.200	250	181	52	34	34
19	82	166	3.320	1.080	422	939	1.300	223	139	52	34	43
20	76	248	2.780	886	389	1.060	1.450	198	114	54	34	132
21	70	202	1.940	783	361	974	1.250	178	103	54	34	119
22	70	202	3.480	722	345	965	1.100	164	96	52	34	96
23	67	175	3.040	665	325	854	1.100	164	103	52	34	222
24	63	150	3.310	668	315	810	950	314	92	51	40	638
25	61	137	2.170	942	323	780	800	374	88	51	58	595
26	65	515	1.410	796	334	750	750	260	88	49	48	245
27	63	580	1.230	677	373	700	695	212	84	48	42	144
28	92	397	1.320	605	387	650	598	188	78	46	40	103
29	105	344	1.050	602	------	600	528	171	74	46	39	86
30	90	284	836	746	------	750	470	160	74	45	37	74
31	82	------	710	891	------	1.100	------	154	------	43	36	------
TOTAL	3.231	8.810	37.298	33.736	14.303	25.032	23.846	8.840	3.145	1.754	1.198	3.106
MEAN	104	294	1.203	1.088	511	807	795	285	105	56.6	38.6	104
MAX	348	947	4.260	4.660	831	1.500	1.450	430	187	70	58	638
MIN	46	94	100	336	315	531	470	154	74	43	34	30
CFSM	.46	1.30	5.30	4.79	2.25	3.56	3.50	1.26	.46	.25	.17	.46
IN.	.53	1.44	6.11	5.53	2.34	4.10	3.91	1.45	.52	.29	.20	.51
AC-FT	6.410	17.470	73.980	66.920	28.370	49.650	47.300	17.530	6.240	3.480	2.380	6.160

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CAL YR 1972   TOTAL 359.231   MEAN 982   MAX 16.800   MIN 42   CFSM 4.33   IN 58.87   AC-FT 712.500
WTR YR 1973   TOTAL 164.299   MEAN 450   MAX  4.660   MIN 30   CFSM 1.98   IN 26.92   AC-FT 325.900
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PEAK DISCHARGE (BASE, 4,800 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
12-17	1630	7.89	5,920	1-12	2030	7.87	5,900
12-22	1700	7.15	4,830				

14317600 ROCK CREEK NEAR GLIDE, OREG.

LOCATION.--Lat 43°20'45", long 122°59'30", in SE¼SE¼ sec.36, T.25 S., R.3 W., Douglas County, on left bank 0.3 mi (0.5 km) downstream from McComas Creek, 5.8 mi (9.3 km) northeast of Glide, and at mile 1.2 (1.9 km).

DRAINAGE AREA.--97.4 mi^2 (252.3 km^2).

PERIOD OF RECORD.--Water years 1956-57 (annual maximums only), June 1957 to June 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 940 ft (287 m), from topographic map. Nov. 8, 1955, to June 16, 1957, nonrecording gage and June 17, 1957, to Sept. 30, 1965, water-stage recorder at site 800 ft (244 m) downstream at different datum.

AVERAGE DISCHARGE.--15 years (1957-72), 373 ft^3/s (10.6 m^3/s), 52.01 in/yr (1,321 mm/yr), 270,200 acre-ft/yr (333 hm^3/yr).

EXTREMES.--Maximum discharge during period October 1972 to June 1973 (also maximum for water year), 2,250 ft^3/s (63.7 m^3/s) Dec. 17, gage height, 6.11 ft (1.862 m); minimum, 22 ft^3/s (0.62 m^3/s) Oct. 9.

Period of record: Maximum discharge, 22,800 ft^3/s (646 m^3/s) Dec. 22, 1964, gage height, 20.3 ft (6.19 m), from floodmark, site and datum then in use, from rating curve extended above 5,400 ft^3/s (153 m^3/s) on basis of slope-area measurement at gage height 14.83 ft (4.520 m); minimum, 14 ft^3/s (0.40 m^3/s) Sept. 5-11, 1966.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	56	130	393	376	262	590	210	69			
2	25	111	122	422	342	265	590	195	68			
3	25	179	271	415	315	259	520	185	67			
4	25	408	220	359	325	277	496	197	64			
5	25	325	176	321	349	271	488	176	62			
6	25	190	158	280	359	259	445	160	60			
7	24	132	128	250	328	231	386	152	57			
8	23	130	90	231	289	212	342	148	56			
9	24	122	90	218	274	205	315	140	56			
10	92	220	82	220	268	652	292	132	55			
11	111	188	82	452	253	657	271	124	54			
12	63	134	88	1,460	256	480	265	118	55			
13	95	107	84	1,650	239	430	328	112	57			
14	85	90	75	1,150	231	404	268	111	54			
15	57	78	74	789	223	372	242	102	56			
16	49	72	215	884	210	379	268	98	61			
17	45	66	1,690	932	210	404	620	93	88			
18	39	67	1,420	762	207	393	668	88	88			
19	37	138	1,190	586	197	545	773	87	66			
20	37	176	1,080	504	185	625	745	84	57			
21	35	148	767	480	176	554	630	82	54			
22	34	142	1,240	433	169	532	610	79	52			
23	34	122	1,290	393	160	476	545	84	53			
24	33	105	1,540	400	158	449	460	138	51			
25	32	95	1,190	508	154	445	397	140	49			
26	32	236	795	433	163	404	349	103	51			
27	32	256	762	383	167	372	308	92	46			
28	47	197	784	345	174	355	274	84	44			
29	71	174	625	318	------	332	250	79	43			
30	54	150	512	355	------	408	228	76	42			
31	46	------	452	422	------	605	------	74	------			------
TOTAL	1,383	4,614	17,422	16,748	6,757	12,514	12,963	3,743	1,735			
MEAN	44.6	154	562	540	241	404	432	121	57.8			
MAX	111	408	1,690	1,650	376	657	773	210	88			
MIN	23	56	74	218	154	205	228	74	42			
CFSM	.46	1.58	5.77	5.54	2.47	4.15	4.44	1.24	.59			
IN.	.53	1.76	6.65	6.40	2.58	4.78	4.95	1.43	.66			
AC-FT	2,740	9,150	34,560	33,220	13,400	24,820	25,710	7,420	3,440			

CAL YR 1972 TOTAL 173,004 MEAN 473 MAX 9,190 MIN 18 CFSM 4.86 IN 66.08 AC-FT 343,200

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

14318000 LITTLE RIVER AT PEEL, OREG.

LOCATION.--Lat 43°15'10", long 123°01'30", in NW¼ sec.2, T.27 S., R.3 W., Douglas County, on left bank 0.6 mi (1.0 km) southeast of Peel, 0.9 mi (1.5 km) downstream from Cavitt Creek, and at mile 6.3 (10.1 km).

DRAINAGE AREA.--177 mi² (458 km²).

PERIOD OF RECORD.--August 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.33 ft (252.475 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 473 ft³/s (13.4 m³/s), 36.29 in/yr (922 mm/yr), 342,700 acre-ft/yr (423 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,140 ft³/s (88.9 m³/s) Jan. 12, gage height, 7.10 ft (2.164 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 5, 6, 12-17.

Period of record: Maximum discharge, 21,100 ft³/s (598 m³/s) Dec. 11, 1956, gage height, 19.63 ft (5.983 m), from rating curve extended above 5,900 ft³/s (167 m³/s) on basis of slope-area measurement at gage height 16.55 ft (5.044 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 2, 9, 10, 28, 29, 1967.

Flood of Nov. 22, 23, 1953, reached a stage of 20.6 ft (6.28 m), from floodmark, discharge, 22,700 ft³/s (643 m³/s), from rating curve extended above 5,900 ft³/s (167 m³/s) on basis of slope-area measurement at gage height 16.55 ft (5.044 m).

REMARKS.--Records excellent. No regulation. Small diversions for rural domestic use and irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	51	131	395	402	331	845	266	84	46	21	17
2	26	100	117	436	361	332	778	243	79	44	21	17
3	26	119	218	440	330	303	673	230	77	43	20	16
4	26	308	194	367	322	310	616	256	73	40	20	16
5	25	327	150	315	357	301	620	244	69	40	20	16
6	24	175	138	273	396	286	585	220	65	38	20	15
7	24	125	13	233	345	257	488	205	62	38	20	19
8	23	133	72	215	305	234	416	192	60	36	20	22
9	25	119	70	200	294	219	386	180	58	36	20	20
10	46	138	70	218	291	539	370	169	58	34	20	18
11	113	125	70	568	276	717	353	159	56	34	20	17
12	81	100	70	2.040	267	545	350	151	56	32	20	16
13	63	86	70	2.230	242	549	718	147	61	32	19	16
14	56	75	70	1.430	231	574	565	146	56	30	19	15
15	61	67	75	940	229	530	457	137	64	30	18	15
16	51	61	191	1.230	213	544	442	128	63	30	17	16
17	42	58	1.370	1.200	209	561	886	121	119	28	18	16
18	37	58	1.250	916	198	488	1.010	114	127	28	19	17
19	35	111	1.190	727	187	725	1.200	108	93	27	18	23
20	33	180	886	590	173	800	1.160	103	78	30	18	54
21	32	145	744	530	164	731	971	98	70	31	17	50
22	31	165	1.580	455	156	740	899	93	64	30	17	39
23	30	135	1.450	391	149	657	806	94	67	29	17	98
24	29	113	1.820	379	146	646	662	157	60	28	20	200
25	29	98	1.140	525	167	664	554	233	58	27	33	242
26	30	305	749	455	175	571	490	156	56	26	28	113
27	30	359	645	392	208	489	442	128	52	25	22	72
28	52	239	700	361	204	463	386	112	50	24	20	52
29	72	194	579	359	------	437	335	103	48	23	20	43
30	51	158	465	402	------	573	296	95	47	22	19	38
31	43	------	465	473	------	912	------	90	------	22	19	------
TOTAL	1.273	4.427	16.852	19.685	6.997	16.028	18.759	4.878	2.030	983	620	1.328
MEAN	41.1	148	544	635	250	517	625	157	67.7	31.7	20.0	44.3
MAX	113	359	1.820	2.230	402	912	1.200	266	127	46	33	242
MIN	23	51	70	200	146	219	296	90	47	22	17	15
CFSM	.23	.84	3.07	3.59	1.41	2.92	3.53	.89	.38	.18	.11	.25
IN.	.27	.93	3.54	4.14	1.47	3.37	3.94	1.03	.43	.21	.13	.28
AC-FT	2.520	8.780	33.430	39.050	13.880	31.790	37.210	9.680	4.030	1.950	1.230	2.630

CAL YR 1972 TOTAL 205.101 MEAN 560 MAX 11.300 MIN 20 CFSM 3.16 IN 43.11 AC-FT 406.800
WTR YR 1973 TOTAL 93.860 MEAN 257 MAX 2.230 MIN 15 CFSM 1.45 IN 19.73 AC-FT 186.200

PEAK DISCHARGE (BASE, 6,000 CFS).--No peak above base.

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OREG.

LOCATION.--Lat 43°16'20", long 123°24'40", in NW¼NE¼ sec.33, T.26 S., R.6 W., Douglas County, on left bank 400 ft (122 m) downstream from county bridge, 3.0 mi (4.8 km) west of Winchester, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--1,344 mi^2 (3,481 km^2).

PERIOD OF RECORD.--October 1908 to December 1913, October 1923 to September 1929, August 1954 to current year. Prior to December 1908, monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 372.97 ft (113.681 m) above mean sea level (Douglas County Road Department bench mark). Oct. 1, 1908, to Dec. 31, 1913, and Oct. 1, 1923, to Sept. 30, 1929, nonrecording gage at site 4.8 mi (7.7 km) upstream at different datums. Aug. 27, 1954, to Aug. 12, 1965, water-stage recorder on right bank at same datum.

AVERAGE DISCHARGE.--30 years, 3,698 ft^3/s (105 m^3/s), 2,679,000 acre-ft/yr (3.30 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 18,300 ft^3/s (518 m^3/s) Jan. 13, gage height, 9.52 ft (2.902 m); minimum, 657 ft^3/s (18.6 m^3/s) Aug. 16.

Period of record: Maximum discharge, 150,000 ft^3/s (4,250 m^3/s) Dec. 22, 1964, gage height, 34.2 ft (10.42 m), from floodmark; minimum, 383 ft^3/s (10.8 m^3/s) Sept. 25, 1960; minimum daily, 578 ft^3/s (16.4 m^3/s) Sept. 14, 1959.

Flood of Oct. 29, 1950, reached a stage of 23.2 ft (7.07 m), from floodmark, at site 4.8 mi (7.7 km) upstream at different datum, discharge, 88,000 ft^3/s (2,490 m^3/s). Flood of Nov. 23, 1953, reached a stage of 28.4 ft (8.66 m), from floodmarks, present site and datum, discharge, 93,300 ft^3/s (2,640 m^3/s).

REMARKS.--Records good. Diurnal fluctuation caused by upstream powerplants; slight regulation by Lemolo Lake (see station 14313000) and Diamond Lake. Several small diversions for irrigation above station. Records of water temperatures and suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1448: 1909-12, drainage area. WRD Oreg. 1972: 1965(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,140	1,260	1,660	3,550	3,860	2,760	5,400	2,620	1,680	1,240	956	918
2	996	1,490	1,390	3,460	3,410	3,280	5,020	2,420	1,590	1,020	964	846
3	1,170	1,810	1,550	3,690	3,190	3,000	4,500	2,390	1,580	932	908	818
4	1,150	2,480	2,030	3,410	3,070	3,040	4,120	2,480	1,510	900	818	797
5	1,150	3,750	2,000	3,020	3,230	3,020	4,060	2,450	1,540	964	832	741
6	1,170	2,480	1,790	2,860	3,590	2,910	3,930	2,310	1,490	908	832	790
7	1,210	1,930	1,840	2,570	3,420	2,760	3,640	2,220	1,470	839	825	853
8	1,200	1,810	1,730	2,360	3,120	2,560	3,230	2,250	1,500	900	825	911
9	1,080	1,730	1,500	2,330	2,880	2,520	2,940	2,280	1,370	900	900	804
10	1,300	1,780	1,500	2,250	2,810	3,330	2,880	2,250	1,330	850	825	790
11	1,560	2,050	1,500	2,920	2,760	6,280	2,840	2,190	1,300	800	804	797
12	1,790	1,760	1,700	9,020	2,810	4,660	2,810	2,240	1,310	850	832	804
13	1,580	1,590	1,600	16,500	2,750	4,240	4,080	2,150	1,180	850	818	776
14	1,730	1,510	1,490	11,900	2,590	4,040	3,800	2,220	1,120	900	868	797
15	1,490	1,440	1,460	7,630	2,570	3,730	3,370	2,380	1,110	1,000	790	790
16	1,330	1,430	1,420	7,830	2,480	3,730	2,990	2,280	1,030	948	727	727
17	1,320	1,390	7,950	8,680	2,380	4,360	4,580	2,280	1,070	956	797	706
18	1,310	1,330	11,500	6,920	2,420	3,860	5,880	2,260	1,390	1,010	868	762
19	1,260	1,470	9,050	5,900	2,360	4,880	6,410	2,180	1,400	932	916	846
20	1,280	1,900	10,000	4,720	2,210	5,930	6,340	1,870	1,260	839	762	988
21	1,200	1,820	6,960	4,460	2,110	5,200	5,530	1,750	1,250	948	713	1,140
22	1,250	1,820	10,400	4,060	2,020	4,960	5,100	1,860	1,290	892	706	956
23	1,230	1,760	12,300	3,690	2,000	4,460	4,940	1,820	1,240	839	706	1,060
24	1,210	1,650	12,700	3,500	1,970	4,100	4,440	1,930	1,190	900	713	1,330
25	1,220	1,520	9,500	4,480	2,000	4,040	3,890	2,510	1,150	988	769	2,830
26	1,230	1,650	6,610	4,280	2,030	3,860	3,590	2,250	1,210	884	790	1,940
27	1,220	3,120	5,420	3,750	2,250	3,570	3,500	2,030	1,290	846	741	1,470
28	1,270	2,430	5,990	3,420	2,290	3,500	3,590	1,790	1,290	980	734	1,140
29	1,410	2,050	5,160	3,260	------	3,170	3,280	1,750	1,340	1,000	720	1,000
30	1,330	1,900	4,400	3,480	------	3,140	3,000	1,690	1,250	948	727	972
31	1,310	------	3,950	4,160	------	4,640	------	1,650	------	908	720	------
TOTAL	40,096	56,110	148,050	154,060	74,580	119,530	123,680	66,750	39,730	28,671	24,906	29,899
MEAN	1,293	1,870	4,776	4,970	2,664	3,856	4,123	2,153	1,324	925	803	997
MAX	1,790	3,750	12,700	16,500	3,860	6,280	6,410	2,620	1,680	1,240	964	2,830
MIN	996	1,260	1,390	2,250	1,970	2,520	2,810	1,650	1,030	800	706	706
AC-FT	79,530	111,300	293,700	305,600	147,900	237,100	245,300	132,400	78,800	56,870	49,400	59,300

CAL YR 1972 TOTAL 1,777,798 MEAN 4,857 MAX 59,900 MIN 884 AC-FT 3,526,000
WTR YR 1973 TOTAL 906,062 MEAN 2,482 MAX 16,500 MIN 706 AC-FT 1,797,000

PEAK DISCHARGE (BASE, 20,000 CFS).--No peak above base.

14320700 CALAPOOYA CREEK NEAR OAKLAND, OREG.

LOCATION.--Lat 43°24'10", long 123°21'45", in NW¼ sec.13, T.25 S., R.6 W., Douglas County, near center of span on downstream side of highway bridge, 0.9 mi (1.4 km) downstream from Williams Creek, 2.5 mi (4.0 km) northwest of Sutherlin, 3.5 mi (5.6 km) southwest of Oakland, and at mile 10.1 (16.3 km).

DRAINAGE AREA.--210 mi^2 (544 km^2).

PERIOD OF RECORD.--October 1955 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 371.26 ft (113.160 m) above mean sea level. Prior to June 22, 1968, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--18 years, 495 ft^3/s (14.0 m^3/s), 32.01 in/yr (813 mm/yr), 358,600 acre-ft/yr (442 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,560 ft^3/s (72.5 m^3/s) Jan. 13, gage height, 8.62 ft (2.627 m); minimum, 0.17 ft^3/s (0.005 m^3/s) Aug. 23.
Period of record: Maximum discharge, 26,600 ft^3/s (753 m^3/s) Nov. 23, 1961, gage height, 21.55 ft (6.568 m); no flow Sept. 9-11, 1966.

REMARKS.--Records good. No regulation. Diversion above station for municipal supply of cities of Sutherlin and Oakland. Small diversions by pumping for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	36	106	505	533	454	1.280	174	44	14	2.0	3.8
2	16	43	97	526	467	454	1.180	150	43	14	2.4	4.0
3	15	67	217	572	412	416	908	148	42	12	1.8	3.6
4	15	204	238	592	441	438	740	162	39	11	2.4	3.0
5	16	287	178	526	444	389	624	158	36	10	2.6	1.4
6	15	172	158	484	432	342	530	137	34	9.9	3.0	2.4
7	15	128	110	409	400	316	448	127	33	12	2.8	2.4
8	14	118	95	360	363	277	392	121	30	12	3.6	3.0
9	14	111	75	328	336	256	345	112	27	11	4.0	7.9
10	76	121	65	302	322	409	305	101	27	9.9	5.0	7.2
11	152	135	50	474	296	544	274	94	26	9.9	4.3	5.4
12	77	110	55	1.280	307	457	254	88	25	8.9	3.8	4.0
13	61	92	55	2.090	277	454	310	80	29	8.4	5.0	3.0
14	95	78	55	1.460	256	464	264	75	28	9.4	4.0	3.8
15	65	68	55	1.010	246	428	232	68	28	9.4	2.8	4.7
16	48	61	125	1.660	227	438	223	63	31	8.4	2.4	5.4
17	39	57	1.100	1.490	222	664	541	58	42	7.9	2.6	6.1
18	34	55	1.300	1.110	217	588	764	52	56	7.5	2.4	6.5
19	30	70	984	988	204	1.160	853	50	42	7.2	2.8	8.4
20	28	108	980	816	190	1.460	848	50	31	6.5	3.3	18
21	26	95	824	740	180	1.090	705	47	26	8.4	2.8	30
22	25	111	1.520	612	172	864	591	46	23	10	1.2	21
23	23	103	1.340	519	160	708	501	48	22	11	.40	23
24	22	89	1.750	491	156	604	422	74	22	9.4	1.4	69
25	22	77	1.420	756	190	530	358	116	23	8.4	4.7	200
26	22	86	948	720	192	464	308	80	23	8.4	11	95
27	24	164	1.050	604	241	451	268	64	21	6.8	7.9	59
28	25	142	1.120	516	233	477	237	58	19	5.4	5.7	41
29	56	135	912	457	------	409	210	54	16	5.4	4.0	36
30	50	120	728	467	------	457	191	50	15	4.3	4.3	29
31	40	------	620	632	------	704	------	49	------	3.6	4.0	------
TOTAL	1.176	3.243	18.330	23.496	8.116	17.166	15.106	2.762	903	280.4	110.40	707.0
MEAN	37.9	108	591	758	290	554	504	89.1	30.1	9.05	3.56	23.6
MAX	152	287	1.750	2.090	533	1.460	1.280	174	56	14	11	200
MIN	14	36	50	302	156	256	191	46	15	3.6	.40	1.4
CFSM	.18	.51	2.81	3.61	1.38	2.64	2.40	.42	.14	.04	.02	.11
IN.	.21	.57	3.25	4.16	1.44	3.04	2.68	.49	.16	.05	.02	.13
AC-FT	2.330	6.430	36.360	46.600	16.100	34.050	29.960	5.480	1.790	556	219	1.400

CAL YR 1972 TOTAL 191.440.20 MEAN 523 MAX 10.700 MIN 1.4 CFSM 2.49 IN 33.91 AC-FT 379.700
WTR YR 1973 TOTAL 91.395.80 MEAN 250 MAX 2.090 MIN .40 CFSM 1.19 IN 16.19 AC-FT 181.300

PEAK DISCHARGE (BASE, 6,300 CFS).--No peak above base.

14321000 UMPQUA RIVER NEAR ELKTON, OREG.

LOCATION.--Lat 43°35'10", long 123°33'15", in NW¼ sec.8, T.23 S., R.7 W., Douglas County, on left bank 3.5 mi (5.6 km) south of Elkton, 8.3 mi (13.4 km) upstream from Elk Creek, and at mile 56.9 (91.6 km).

DRAINAGE AREA.--3,683 mi² (9,539 km²).

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 90.42 ft (27.560 m) above mean sea level. Prior to June 29, 1972, at site 2,400 ft (732 m) downstream at same datum. See WSP 1931 or 2135 for history of changes prior to June 29, 1972.

AVERAGE DISCHARGE.--68 years, 7,484 ft³/s (212 m³/s), 27.60 in/yr (701 mm/yr), 5,422,000 acre-ft/yr (6.69 km³/yr).

EXTREMES.--Current year: Maximum discharge, 35,600 ft³/s (1,010 m³/s) Jan. 13, gage height, 15.71 ft (4.788 m); minimum, 712 ft³/s (20.2 m³/s) Aug. 18.

Period of record: Maximum discharge, 265,000 ft³/s (7,500 m³/s) Dec. 23, 1964, gage height, 51.95 ft (15.834 m), from floodmarks; minimum observed, 640 ft³/s (18.1 m³/s) July 18, 1926.

Maximum stage since at least December 1861, that of Dec. 23, 1964.

REMARKS.--Records excellent. Regulation by powerplants on North Umpqua River ordinarily do not affect discharge at this station. Diversions for irrigation above station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1184: 1927(M), 1938(M), 1943(M), 1946(M). WSP 1448: 1911-13, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,400	1,730	2,790	7,420	9,180	5,060	11,800	4,820	2,100	1,340	901	811
2	1,390	1,730	2,450	6,700	8,200	6,100	12,300	4,360	2,090	1,300	930	820
3	1,290	1,900	2,170	6,840	7,230	6,280	11,200	4,110	1,990	1,150	930	930
4	1,360	2,340	2,550	7,010	6,720	6,060	9,800	4,030	1,960	1,040	901	883
5	1,360	3,870	3,380	6,360	6,500	5,960	8,900	4,160	1,880	1,030	847	901
6	1,350	4,840	3,360	5,920	6,740	5,780	8,400	4,040	1,870	970	811	883
7	1,370	3,610	2,930	5,460	7,050	5,540	7,680	3,800	1,810	980	820	847
8	1,390	2,900	2,800	4,960	6,580	5,110	6,820	3,610	1,750	910	820	930
9	1,390	2,650	2,340	4,600	5,990	4,770	6,050	3,600	1,750	930	811	930
10	1,320	2,660	1,900	4,390	5,790	4,700	5,610	3,550	1,620	980	829	883
11	1,520	2,680	1,900	4,560	5,690	7,720	5,330	3,420	1,560	960	847	874
12	1,920	2,970	1,920	7,860	5,830	9,250	5,160	3,320	1,520	892	811	865
13	2,210	2,620	2,170	30,500	5,850	7,600	5,520	3,280	1,520	950	820	892
14	2,250	2,270	2,100	28,800	5,580	7,080	8,050	3,200	1,410	950	820	874
15	2,250	2,060	2,000	18,800	5,330	7,000	6,800	3,340	1,350	940	820	865
16	1,900	1,960	2,000	16,500	5,180	7,000	6,060	3,440	1,340	1,000	847	874
17	1,690	1,880	3,530	24,700	4,930	7,400	5,790	3,320	1,330	1,000	775	838
18	1,620	1,840	22,300	18,900	4,710	7,880	9,730	3,260	1,310	960	730	802
19	1,590	1,920	18,200	16,200	4,620	7,850	11,100	3,210	1,650	990	829	811
20	1,540	2,120	19,100	13,500	4,350	13,600	12,300	3,010	1,760	1,070	865	901
21	1,530	2,900	15,200	11,900	4,140	13,700	11,700	2,620	1,590	856	847	1,000
22	1,470	3,110	16,200	10,600	3,880	12,400	10,200	2,510	1,480	950	730	1,200
23	1,500	2,900	28,800	9,380	3,720	11,100	9,400	2,580	1,500	940	730	1,180
24	1,470	2,720	23,700	8,200	3,630	9,750	8,580	2,540	1,410	940	739	1,230
25	1,460	2,510	22,400	8,900	3,740	8,900	7,580	2,720	1,350	892	757	1,640
26	1,460	2,270	15,200	11,600	4,120	8,400	6,680	3,420	1,340	990	775	3,310
27	1,460	2,550	11,700	10,400	4,700	7,600	6,140	3,150	1,360	980	820	2,580
28	1,470	3,950	11,500	8,950	4,890	7,380	6,080	2,750	1,410	883	829	1,890
29	1,530	3,710	11,300	7,880	-------	6,900	5,740	2,440	1,380	930	811	1,450
30	1,670	3,080	9,510	7,450	-------	6,460	5,360	2,310	1,440	1,000	820	1,240
31	1,660	-------	8,290	8,780	-------	7,930	-------	2,190	-------	970	829	-------
TOTAL	48,790	80,250	275,690	344,020	154,870	238,260	241,860	102,110	47,830	30,673	25,451	34,134
MEAN	1,574	2,675	8,893	11,100	5,531	7,686	8,062	3,294	1,594	989	821	1,138
MAX	2,250	4,840	28,800	30,500	9,180	13,700	12,300	4,820	2,100	1,340	930	3,310
MIN	1,290	1,730	1,900	4,390	3,630	4,700	5,160	2,190	1,310	856	730	802
CFSM	.43	.73	2.41	3.01	1.50	2.09	2.19	.89	.43	.27	.22	.31
IN.	.49	.81	2.78	3.47	1.56	2.41	2.44	1.03	.48	.31	.26	.34
AC-FT	96,770	159,200	546,800	682,400	307,200	472,600	479,700	202,500	94,870	60,840	50,480	67,700

CAL YR 1972 TOTAL 3,387,240 MEAN 9,255 MAX 137,000 MIN 1,030 CFSM 2.51 IN 34.21 AC-FT 6,719,000
WTR YR 1973 TOTAL 1,623,938 MEAN 4,449 MAX 30,500 MIN 730 CFSM 1.21 IN 16.40 AC-FT 3,221,000

PEAK DISCHARGE (BASE, 52,000 CFS).--No peak above base.

14322000 ELK CREEK NEAR DRAIN, OREG.

LOCATION.--Lat 43°38'30", long 123°17'50", in NE¼SW¼ sec.21, T.22 S., R.5 W., Douglas County, on right bank at downstream side of highway bridge, 0.2 mi (0.3 km) downstream from Yoncalla Creek, 1.7 mi (2.7 km) southeast of Drain, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--104 mi^2 (269 km^2).

PERIOD OF RECORD.--October 1955 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 305.96 ft (93.257 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 222 ft^3/s (6.29 m^3/s), 28.99 in/yr (736 mm/yr), 160,800 acre-ft/yr (198 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,460 ft^3/s (41.3 m^3/s) Jan. 13, gage height, 6.95 ft (2.118 m); minimum, 0.01 ft^3/s (0.0003 m^3/s) July 18.
Period of record: Maximum discharge, 15,000 ft^3/s (425 m^3/s) Feb. 10, 1961, gage height, 23.7 ft (7.22 m), from floodmark, from rating curve extended above 7,500 ft^3/s (212 m^3/s); no flow at times.

REMARKS.--Records good. No regulation. Small diversions by pumping for irrigation above station. Municipal supply for town of Yoncalla is diverted from Wilson Creek above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	9.4	20	202	224	181	506	61	14	2.8	.09	.02
2	4.0	10	19	214	202	191	518	57	13	3.0	.09	.02
3	3.5	26	68	226	179	204	397	55	13	2.8	.32	.03
4	3.7	45	74	220	208	244	307	62	12	2.2	.32	.03
5	4.0	39	49	200	187	210	244	52	11	1.9	.18	.03
6	4.0	22	42	189	176	200	196	51	9.8	1.9	.09	.03
7	4.0	17	28	156	165	165	161	49	8.9	1.5	.03	.03
8	4.0	20	20	136	148	140	141	46	8.4	1.1	.47	.03
9	3.7	22	17	128	138	125	125	44	8.4	1.2	.47	1.5
10	7.1	36	17	122	140	194	111	40	7.5	1.2	.32	1.4
11	13	34	18	167	135	214	97	37	7.1	.62	.18	.91
12	9.8	22	20	610	135	183	88	36	6.6	.47	.32	.03
13	8.4	17	18	1.250	116	177	92	34	8.0	.47	.03	.02
14	13	15	17	782	109	165	82	31	8.0	.76	.03	.03
15	8.9	13	17	506	101	146	74	28	7.1	.62	.02	.03
16	7.1	12	22	968	94	151	80	26	6.6	.62	.09	.02
17	6.3	11	415	806	91	220	133	24	10	.03	.03	.09
18	6.0	13	533	566	88	200	172	21	12	.02	.03	.09
19	5.7	41	488	516	83	562	194	20	8.9	.03	.03	1.9
20	6.0	42	540	419	77	752	251	19	6.3	.02	.03	5.4
21	6.0	35	424	380	73	533	202	19	5.7	.47	.03	4.9
22	6.3	40	1.020	303	71	395	163	18	5.2	1.1	.03	4.0
23	6.6	33	731	251	67	312	138	20	5.2	.62	.18	5.7
24	6.3	26	947	268	65	255	117	37	4.9	.03	.47	9.4
25	6.6	22	680	378	111	212	103	44	4.9	.03	1.1	13
26	7.1	27	424	362	106	177	91	33	5.4	.03	1.7	7.1
27	8.0	26	583	305	122	177	80	26	5.2	.32	1.7	4.9
28	8.9	25	576	255	120	189	73	21	4.6	.18	1.4	3.7
29	14	24	417	220	------	155	71	19	3.5	.18	1.1	3.0
30	13	21	318	226	------	176	65	17	3.3	.09	.03	2.8
31	10	------	257	263	------	276	------	16	------	.03	.03	------
TOTAL	218.5	745.4	8.819	11.594	3.523	7.481	5.072	1.073	234.5	26.34	10.94	70.14
MEAN	7.05	24.8	284	374	126	241	169	34.6	7.82	.85	.35	2.34
MAX	14	45	1.020	1.250	224	752	518	62	14	3.0	1.7	13
MIN	3.5	9.4	17	122	65	125	65	16	3.3	.02	.02	.02
CFSM	.07	.24	2.73	3.60	1.21	2.32	1.63	.33	.08	.008	.003	.02
IN.	.08	.27	3.15	4.15	1.26	2.68	1.81	.38	.08	.009	.003	.03
AC-FT	433	1.480	17.490	23.000	6.990	14.840	10.060	2.130	465	52	22	139

CAL YR 1972 TOTAL 89.670.70 MEAN 245 MAX 5.550 MIN .03 CFSM 2.36 IN 32.07 AC-FT 177.960
WTR YR 1973 TOTAL 38.867.82 MEAN 106 MAX 1.250 MIN .02 CFSM 1.02 IN 13.90 AC-FT 77.090

PEAK DISCHARGE (BASE, 3,100 CFS).--No peak above base

14323100 SMITH RIVER NEAR GARDINER, OREG.

LOCATION.--Lat 43°47'05", long 123°48'50", in SW¼SE¼ sec.31, T.20 S., R.9 W., Douglas County, on right bank 0.1 mi (0.2 km) downstream from Buck Creek, 15 mi (24 km) northeast of Gardiner, and at mile 28.5 (45.9 km).

DRAINAGE AREA.--206 mi² (534 km²), at cableway site 0.2 mi (0.3 km) downstream.

PERIOD OF RECORD.--October 1965 to June 1973 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 50 ft (15 m), from topographic map.

AVERAGE DISCHARGE.--7 years (1966-1972), 976 ft³/s (27.6 m³/s), 49.84 in/yr (1,266 mm/yr), 547,700 acre-ft/yr (675 hm³/yr).

EXTREMES.--Maximum discharge during period October 1972 to June 1973, 6,340 ft³/s (180 m³/s) Dec. 22, gage height, 6.20 ft (1.890 m); minimum, 9.6 ft³/s (0.27 m³/s) Oct. 8-10.

Period of record: Maximum discharge, 20,500 ft³/s (581 m³/s) Jan. 21, 1972, gage height, 13.18 ft (4.017 m), from rating curve extended above 13,000 ft³/s (368 m³/s); minimum, 4.3 ft³/s (0.12 m³/s) Aug. 26, 1966.

Flood of Feb. 10, 1961, reached a stage of 15.80 ft (4.816 m) from floodmark, discharge, 26,000 ft³/s (736 m³/s) revised. Flood of December 1964 may have been higher.

REMARKS.--Records good. No regulation or diversion above station. Records given herein are for measuring site 0.2 mi (0.3 km) downstream.

REVISIONS (WATER YEARS).--WRD Oreg. 1971: 1966(P), 1969(P), 1970(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	32	144	764	740	780	1,260	196	70			
2	14	72	141	692	660	1,280	1,170	187	68			
3	13	118	237	684	572	1,070	883	178	68			
4	13	255	260	660	519	844	705	186	68			
5	12	232	228	612	458	724	587	179	63			
6	12	155	201	556	428	660	495	170	59			
7	11	137	155	491	392	580	432	161	57			
8	11	165	150	440	356	505	390	158	55			
9	9.6	189	140	422	335	458	355	158	55			
10	10	470	130	398	320	732	327	152	52			
11	15	270	120	596	310	1,020	304	141	50			
12	22	177	120	2,110	315	870	286	133	50			
13	22	124	110	4,750	315	796	284	126	52			
14	22	96	100	3,220	310	732	271	121	52			
15	22	79	95	1,820	295	636	248	115	52			
16	21	70	220	1,930	270	580	249	108	63			
17	19	61	3,000	2,450	265	636	348	103	101			
18	19	66	2,910	1,800	265	676	495	99	101			
19	17	255	3,360	1,780	260	940	733	96	84			
20	16	356	2,910	1,600	246	1,490	686	94	70			
21	16	255	3,900	1,650	237	1,350	528	92	59			
22	15	205	5,260	1,350	228	1,120	432	89	53			
23	15	173	3,670	1,070	214	890	373	91	52			
24	13	148	4,480	1,030	210	740	330	107	52			
25	12	130	3,310	1,360	564	636	300	110	53			
26	12	548	1,800	1,160	804	540	275	101	66			
27	12	452	2,640	930	772	505	251	91	61			
28	21	290	2,730	772	708	526	234	89	55			
29	33	210	1,710	668	------	484	217	86	47			
30	32	169	1,220	628	------	482	208	79	43			
31	28	------	950	748	------	731	------	74	------			------
TOTAL	525.6	5,959	46,401	39,141	11,368	24,013	13,656	3,868	1,831			
MEAN	17.0	199	1,497	1,263	406	775	455	125	61.0			
MAX	33	548	5,260	4,750	804	1,490	1,260	196	101			
MIN	9.6	32	95	398	210	458	208	74	43			
CFSM	.08	.97	7.27	6.13	1.97	3.76	2.21	.61	.30			
IN.	.09	1.08	8.38	7.07	2.05	4.34	2.47	.70	.33			
AC-FT	1,040	11,820	92,040	77,640	22,550	47,630	27,090	7,670	3,630			

CAL YR 1972 TOTAL 282,132.0 MEAN 771 MAX 16,000 MIN 6.4 CFSM 3.74 IN 50.95 AC-FT 559,600

PEAK DISCHARGE (BASE, 7,000 CFS).--No peak above base.

14323200 TENMILE CREEK NEAR LAKESIDE, OREG.

LOCATION.--Lat 43°34'40", long 124°11'30", near center of sec.13, T.23 S., R.13 W., Coos County, in Siuslaw National Forest, near left bank on downstream side of highway bridge, 200 ft (61 m) upstream from Eel Creek, 0.8 mi (1.3 km) upstream from Saunders Creek, and 1.0 mi (1.6 km) west of Lakeside. Records include flow of Eel and Saunders Creeks.

DRAINAGE AREA.--About 87 mi^2 (225 km^2) at measuring section 1.2 mi (1.9 km) downstream.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Auxiliary nonrecording gage 1.4 mi (2.3 km) upstream from base gage, read twice daily. Datum of both gages is at mean sea level.

AVERAGE DISCHARGE.--16 years, 324 ft^3/s (9.18 m^3/s), 234,700 acre-ft/yr (289 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,180 ft^3/s (33.4 m^3/s) Dec. 25, elevation, 11.37 ft (3.466 m) at base gage; minimum, 3.1 ft^3/s (0.088 m^3/s) June 23.

Period of record: Maximum discharge, 3,330 ft^3/s (94.3 m^3/s) Dec. 26, 1964, elevation, 16.46 ft (5.017 m) at base gage, 18.78 ft (5.724 m) at auxiliary gage; minimum, 2.0 ft^3/s (0.057 m^3/s) Aug. 29, Sept. 2, 1967.

Maximum known stage at auxiliary gage, 19.83 ft (6.044 m) in January 1953. from floodmarks.

REMARKS.--Records fair. Flow affected by natural storage in Tenmile Lake and other lakes tributary to Eel and Saunders Creeks. No diversion above station. Records given herein are for measuring site.

REVISIONS (WATER YEARS).--WSP 1718: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	11	95	768	430	232	414	170	66	57	20	8.5
2	8.0	12	96	705	412	250	422	162	65	57	19	8.0
3	7.5	17	105	658	396	264	418	156	62	51	20	7.3
4	7.0	23	110	615	380	274	408	152	62	46	21	7.0
5	11	20	113	578	364	276	394	145	59	42	21	6.0
6	12	17	121	543	350	280	380	137	55	39	24	6.0
7	12	35	119	505	334	278	363	131	50	35	22	7.5
8	12	21	116	468	320	272	347	128	46	32	25	7.5
9	12	26	114	438	306	268	329	123	45	32	25	6.0
10	12	45	111	416	294	296	315	119	49	30	25	5.0
11	12	38	108	410	280	344	299	113	56	29	22	5.0
12	12	38	110	428	254	360	284	108	57	32	24	4.5
13	13	38	110	605	262	374	272	104	53	38	25	4.5
14	13	38	108	730	254	380	260	99	48	44	26	5.1
15	13	37	105	743	244	378	247	94	45	41	23	4.0
16	12	35	118	745	236	380	241	90	43	36	24	4.0
17	12	35	210	753	228	396	238	86	45	39	24	4.0
18	11	37	348	748	218	408	238	81	45	37	22	4.5
19	10	67	455	718	210	465	241	76	45	34	21	13
20	9.0	71	535	693	205	530	242	73	43	31	20	20
21	9.5	78	633	670	196	553	237	69	41	31	21	26
22	9.0	74	809	635	188	550	232	68	38	27	21	40
23	9.0	74	962	600	181	530	228	68	35	20	19	54
24	9.0	72	1,110	578	178	510	220	74	34	15	18	50
25	10	70	1,160	570	197	488	213	72	36	15	18	47
26	10	81	1,070	553	210	465	206	69	40	18	14	44
27	11	93	1,080	530	216	442	198	66	42	19	13	40
28	11	96	1,140	503	218	427	191	65	40	20	12	37
29	11	98	1,060	478	------	409	186	63	45	20	11	35
30	10	96	959	455	------	398	178	65	52	19	10	32
31	10	------	857	446	------	397	------	65	------	20	9.5	------
TOTAL	328.5	1,493	14,147	18,285	7,561	11,874	8,441	3,091	1,442	1,006	619.5	542.4
MEAN	10.6	49.8	456	590	270	383	281	99.7	48.1	32.5	20.0	18.1
MAX	13	98	1,160	768	430	553	422	170	66	57	26	54
MIN	7.0	11	95	410	178	232	178	63	34	15	9.5	4.0
AC-FT	652	2,960	28,060	36,270	15,000	23,550	16,740	6,130	2,860	2,000	1,230	1,080

CAL YR 1972 TOTAL 128,171.2 MEAN 350 MAX 2,850 MIN 2.6 AC-FT 254,200
WTR YR 1973 TOTAL 68,830.4 MEAN 189 MAX 1,160 MIN 4.0 AC-FT 136,500

14323280 EEL LAKE NEAR LAKESIDE, OREG.

LOCATION.--Lat 43°36'17", long 124°10'28", in SE¼NW¼ sec.6, T.23 S., R.12 W., on west shore 0.1 mi (0.2 km) south of Clear Creek and 1.9 mi (3.1 km) north of Lakeside.

DRAINAGE AREA.--8.70 mi² (22.5 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 56.00 ft (17.069 m) above mean sea level; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Current year: Maximum elevation, 61.40 ft (18.714 m) Dec. 27, 28; minimum, 57.55 ft (17.541 m) Sept. 5, 6.
Period of record: Maximum elevation, 63.91 ft (19.480 m) Jan. 22, 1972; minimum, 57.55 ft (17.541 m) Sept. 5, 6, 1973.
Maximum known elevation is 64.08 ft (19.532 m), from high-water mark, date unknown.

REMARKS.--Lake not regulated; lake outlet is a sand channel. The control is subject to shifting at high stages. Some water is pumped from lake for filtration and distribution purposes by Lakeside Water District.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.87	57.94	58.75	60.76	59.97	59.47	60.19	58.86	58.30	58.23	57.86	57.60
2	57.86	57.95	58.86	60.69	59.92	59.51	60.17	58.83	58.28	58.21	57.85	57.58
3	57.85	58.07	58.90	60.63	59.86	59.53	60.13	58.83	58.26	58.20	57.84	57.57
4	57.84	58.13	58.89	60.53	59.81	59.55	60.07	58.80	58.25	58.19	57.82	57.56
5	57.84	58.14	58.93	60.44	59.76	59.57	60.01	58.76	58.24	58.18	57.81	57.55
6	57.84	58.20	58.95	60.34	59.71	59.57	59.94	58.76	58.22	58.16	57.80	57.60
7	57.83	58.23	58.92	60.22	59.66	59.55	59.88	58.72	58.21	58.15	57.80	57.66
8	57.83	58.24	58.87	60.14	59.61	59.52	59.82	58.72	58.20	58.14	57.78	57.60
9	57.84	58.34	58.84	60.05	59.56	59.55	59.75	58.70	58.17	58.13	57.78	57.59
10	57.85	58.37	58.80	60.00	59.54	59.82	59.68	58.67	58.15	58.11	57.77	59.58
11	57.85	58.38	58.76	59.96	59.50	59.90	59.61	58.64	58.14	58.09	57.75	57.58
12	57.85	58.39	58.79	60.25	59.45	59.95	59.55	58.61	58.16	58.08	57.75	57.57
13	57.87	58.40	58.76	60.60	59.40	59.98	59.51	58.59	58.15	58.06	57.75	57.60
14	57.87	58.40	58.74	60.68	59.39	59.97	59.45	58.56	58.15	58.05	57.74	57.60
15	57.87	58.40	58.73	60.72	59.35	59.93	59.39	58.53	58.14	58.04	57.72	57.60
16	57.86	58.40	59.05	60.83	59.32	60.00	59.40	58.50	58.20	58.03	57.72	57.60
17	57.86	58.43	59.72	60.86	59.30	60.01	59.39	58.47	58.24	58.02	57.70	57.60
18	57.86	58.52	60.14	60.83	59.27	60.08	59.40	58.44	58.23	58.01	57.69	57.60
19	57.86	58.68	60.52	60.75	59.23	60.38	59.40	58.41	58.22	58.00	57.67	57.67
20	57.86	58.70	60.67	60.68	59.19	60.47	59.36	58.38	58.21	57.99	57.66	57.69
21	57.87	58.74	60.90	60.59	59.15	60.50	59.32	58.35	58.20	57.98	57.65	57.70
22	57.87	58.73	61.08	60.49	59.12	60.47	59.28	58.34	58.19	57.97	57.64	57.78
23	57.87	58.72	61.16	60.39	59.08	60.41	59.24	58.38	58.18	57.96	57.64	57.83
24	57.86	58.70	61.35	60.40	59.18	60.35	59.19	58.46	58.16	57.95	57.67	57.97
25	57.87	58.70	61.32	60.36	59.32	60.28	59.14	58.45	58.27	57.94	57.67	57.99
26	57.87	58.83	61.26	60.29	59.35	60.21	59.10	58.42	58.31	57.93	57.65	58.00
27	57.88	58.83	61.40	60.21	59.37	60.17	59.03	58.41	58.31	57.92	57.65	58.00
28	57.90	58.83	61.35	60.18	59.38	60.11	58.98	58.39	58.30	57.91	57.64	58.00
29	57.91	58.81	61.22	60.08	------	60.04	58.94	58.37	58.27	57.90	57.63	58.00
30	57.90	58.78	61.08	60.08	------	60.03	58.90	58.35	58.25	57.87	57.62	58.00
31	57.90	------	60.92	60.03	------	60.12	------	58.32	------	57.88	57.61	------
MEAN	57.86	58.47	59.86	60.42	59.46	59.97	59.51	58.55	58.22	58.04	57.72	57.78
MAX	57.91	58.83	61.40	60.86	59.97	60.50	60.19	58.86	58.31	58.23	57.86	59.58
MIN	57.83	57.94	58.73	59.96	59.08	59.47	58.90	58.32	58.14	57.87	57.61	57.55

WTR YR 1973 MEAN 58.82 MAX 61.40 MIN 57.55

14324500 WEST FORK MILLICOMA RIVER NEAR ALLEGANY, OREG.

LOCATION.--Lat 43°28'35", long 124°03'20", in SW¼NW¼ sec.19, T.24 S., R.11 W., Coos County, on left bank at highway bridge, 40 ft (12 m) upstream from Daggett Creek, 3.8 mi (6.1 km) north of Allegany, and at mile 6.82 (10.97 km).

DRAINAGE AREA.--46.9 mi² (121.5 km²), revised.

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 76.95 ft (23.454 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 258 ft³/s (7.31 m³/s), 74.70 in/yr (1,897 mm/yr), 186,900 acre-ft/yr (230 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,070 ft³/s (86.9 m³/s) Dec. 22, gage height, 9.19 ft (2.801 m), from high-water mark in well; minimum, 2.4 ft³/s (0.07 m³/s) Oct. 8, 9.

Period of record: Maximum discharge, 8,100 ft³/s (229 m³/s) Nov. 24, 1960, gage height, 15.86 ft (4.834 m); minimum, 1.8 ft³/s (0.05 m³/s) Sept. 5, 9, 1965, Sept. 8-10, 1967.

Flood in January or November 1953 reached a stage of about 17.9 ft (5.46 m), from information by local resident.

REMARKS.--Records good except those for periods of backwater from beaver dams and period of no gage-height record, which are fair. No regulation. Only minor diversions for irrigation above station. Records of chemical analysis and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1718: 1955-59

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	29	78	280	218	282	355	59	23	19	5.6	4.8
2	3.3	37	91	260	190	435	294	54	22	18	5.3	4.6
3	3.3	89	222	260	165	321	230	53	21	16	5.3	4.6
4	2.9	132	172	252	153	267	188	59	20	15	5.6	4.6
5	2.9	97	131	238	138	233	158	53	19	14	5.6	4.1
6	2.7	50	122	218	131	220	136	47	18	13	5.9	4.3
7	2.7	105	92	188	118	190	120	47	18	13	5.9	5.6
8	2.5	110	90	165	110	165	108	49	17	12	6.2	5.6
9	2.5	115	85	158	102	153	98	52	17	12	6.2	7.1
10	3.8	287	85	150	102	538	90	45	17	11	6.5	5.9
11	5.4	139	85	273	98	526	82	40	16	11	6.5	4.8
12	7.4	81	85	1,090	131	369	76	38	18	9.6	6.2	4.3
13	9.0	56	85	1,860	125	358	78	35	21	9.6	6.5	4.1
14	8.6	43	80	940	118	341	74	33	19	9.6	6.5	4.6
15	8.9	35	80	578	108	276	65	31	18	9.2	5.9	4.3
16	8.7	30	200	574	110	255	76	29	27	8.8	6.5	4.3
17	8.1	26	1,700	566	110	315	155	28	84	8.5	6.2	5.3
18	7.8	40	1,600	510	108	351	238	26	76	8.5	6.2	5.6
19	7.4	223	1,000	546	100	530	303	25	47	7.8	5.6	12
20	7.1	253	900	463	92	570	243	24	35	8.1	5.6	26
21	7.1	150	950	502	88	453	185	23	28	8.8	5.3	76
22	7.4	118	2,000	386	80	372	150	23	25	9.2	5.3	73
23	8.2	94	1,500	297	74	294	129	27	23	8.8	5.3	129
24	7.4	76	1,700	321	76	238	112	60	21	8.5	7.1	312
25	7.1	61	800	407	315	200	100	67	23	7.8	8.1	238
26	6.4	308	650	334	273	170	90	45	39	7.4	8.5	108
27	7.1	267	1,300	270	220	165	80	35	33	6.8	8.1	65
28	15	157	1,200	225	185	178	73	31	27	6.8	6.8	45
29	21	120	850	198	------	155	67	28	23	6.2	5.9	32
30	28	94	600	210	------	170	62	25	21	6.2	5.3	26
31	26	------	400	261	------	273	------	23	------	5.9	5.3	------
TOTAL	249.2	3,422	18,933	12,980	3,838	9,363	4,215	1,214	816	316.1	190.8	1,230.5
MEAN	8.04	114	611	419	137	302	141	39.2	27.2	10.2	6.15	41.0
MAX	28	308	2,000	1,860	315	570	355	67	84	19	8.5	312
MIN	2.5	26	78	150	74	153	62	23	16	5.9	5.3	4.1
CFSM	.17	2.43	13.0	8.93	2.92	6.44	3.01	.84	.58	.22	.13	.87
IN.	.20	2.71	15.02	10.30	3.04	7.43	3.34	.96	.65	.25	.15	.98
AC-FT	494	6,790	37,550	25,750	7,610	18,570	8,360	2,410	1,620	627	378	2,440

CAL YR 1972 TOTAL 99,093.1 MEAN 271 MAX 4,870 MIN 2.1 CFSM 5.78 IN 78.60 AC-FT 196,600
WTR YR 1973 TOTAL 56,767.6 MEAN 156 MAX 2,000 MIN 2.5 CFSM 3.33 IN 45.03 AC-FT 112,600

PEAK DISCHARGE (BASE, 3,000 CFS).--Dec. 22 (time unknown) 3,070 cfs (9.19 ft).

NOTE.--No gage-height record Dec. 8 to Jan. 4.
Backwater from beaver dam Oct. 1 to Nov. 9, June 21 to Sept. 17.

COQUILLE RIVER BASIN

14324700 SOUTH FORK COQUILLE RIVER NEAR ILLAHE, OREG.

LOCATION.--Lat 42°43'30", long 124°00'40", in NW¼ sec.16, T.33 S., R.11 W., Coos County, in Siskiyou National Forest, on left bank 1.0 mi (1.6 km) downstream from Lockhart Creek, 7.0 mi (11.3 km) north of Illahe, and at mile 85.1 (136.9 km).

DRAINAGE AREA.--40.6 mi^2 (105.2 km^2), at measuring site 1.2 mi (1.9 km) upstream from gage.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,871.04 ft (570.293 m) above mean sea level (levels by Pacific Power & Light Co.).

AVERAGE DISCHARGE.--17 years, 193 ft^3/s (5.47 m^3/s), 64.56 in/yr (1,640 mm/yr), 139,800 acre-ft/yr (172 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft^3/s (49.3 m^3/s) Dec. 17, gage height, 6.63 ft (2.021 m); minimum, 1.4 ft^3/s (0.040 m^3/s) Sept. 14-17.

Period of record: Maximum discharge, 12,000 ft^3/s (340 m^3/s) Dec. 22, 1964, gage height, 11.80 ft (3.597 m), from rating curve extended above 3,000 ft^3/s (85.0 m^3/s), on basis of slope-area measurement at gage height 9.54 ft (2.908 m); minimum, 1.2 ft^3/s (0.034 m^3/s) Sept. 27-29, 1967.

Flood of Dec. 21, 1955, reached a stage of about 10.8 ft (3.29 m), discharge, about 8,600 ft^3/s (244 m^3/s).

REMARKS.--Records good. No regulation or diversion above station. Records given herein are for measuring site. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	6.2	59	213	238	378	375	69	19	8.8	3.2	2.2
2	3.1	6.8	53	210	215	354	351	65	19	8.4	3.0	2.2
3	3.1	23	71	198	195	315	330	60	19	8.1	3.0	2.0
4	2.9	55	66	173	183	273	318	61	18	7.7	2.8	2.0
5	2.9	53	59	154	213	245	321	57	17	7.7	2.8	2.0
6	2.7	43	60	138	248	223	297	51	16	7.4	2.8	2.0
7	2.7	60	54	121	228	195	255	48	15	7.1	3.0	2.4
8	2.5	62	44	112	203	170	220	44	14	7.1	2.8	2.4
9	2.9	59	42	105	196	156	193	43	14	6.8	2.8	2.0
10	6.5	98	40	119	198	205	166	39	14	6.8	2.8	1.8
11	11	82	38	288	180	238	146	37	13	6.5	2.8	1.8
12	7.1	60	38	880	185	230	130	36	14	6.2	2.8	1.6
13	5.6	48	35	1,160	173	248	117	34	15	5.9	2.6	1.6
14	4.8	40	32	746	164	255	105	32	14	5.6	2.6	1.6
15	4.3	32	35	558	152	268	95	30	15	5.4	2.4	1.5
16	3.8	31	570	1,100	140	297	91	29	18	5.1	2.4	1.5
17	3.8	28	1,550	835	130	312	114	28	25	4.8	2.4	1.5
18	3.5	36	1,270	656	121	285	116	26	20	4.8	2.2	1.8
19	3.5	175	1,040	498	110	441	168	25	17	4.8	2.2	7.1
20	3.3	190	695	384	102	399	193	25	15	4.8	2.4	16
21	3.3	117	746	336	94	351	198	23	14	5.1	2.4	11
22	3.3	92	1,480	288	88	309	200	23	13	5.1	2.4	10
23	3.3	76	1,050	255	82	291	173	24	12	4.8	2.4	26
24	3.3	66	995	366	105	300	146	36	12	4.6	2.4	46
25	3.1	56	578	471	468	315	125	33	11	4.6	2.6	41
26	3.3	66	372	363	405	297	109	28	11	4.4	2.8	24
27	3.1	74	366	294	354	282	97	25	10	3.9	3.0	17
28	4.8	77	357	250	309	279	88	24	9.9	3.7	2.6	13
29	11	74	306	228	------	265	79	22	9.5	3.7	2.6	11
30	8.3	66	263	240	------	297	74	20	9.1	3.4	2.4	9.5
31	6.2	------	240	258	------	387	------	20	------	3.4	2.4	------
TOTAL	136.3	1,952.0	12,604	11,997	5,481	8,860	5,390	1,117	442.5	176.5	81.8	265.5
MEAN	4.40	65.1	407	397	196	286	180	36.0	14.8	5.69	2.64	8.85
MAX	11	190	1,550	1,160	468	441	375	69	25	8.8	3.2	46
MIN	2.5	6.2	32	105	82	156	74	20	9.1	3.4	2.2	1.5
AC-FT	270	3,870	25,000	23,800	10,870	17,570	10,690	2,220	878	350	162	527

CAL YR 1972 TOTAL 72,380.5 MEAN 198 MAX 3,160 MIN 1.8 AC-FT 143,600
WTR YR 1973 TOTAL 48,503.6 MEAN 133 MAX 1,550 MIN 1.5 AC-FT 96,210

PEAK DISCHARGE (BASE, 1,700 CFS).--Dec. 17 (1200) 1,740 cfs (6.63 ft).

14325000 SOUTH FORK COQUILLE RIVER AT POWERS, OREG.

LOCATION.--Lat 42°53'30", long 124°04'10", in SE¼ sec.12, T.31 S., R.12 W., Coos County, on left bank 0.6 mi (1.0 km) downstream from highway bridge at Powers, 0.9 mi (1.4 km) upstream from Woodward Creek, and at mile 64.5 (103.8 km).

DRAINAGE AREA.--169 mi² (438 km²).

PERIOD OF RECORD.--September 1916 to September 1926, October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 197.42 ft (60.174 m) above mean sea level. Prior to Nov. 17, 1938, nonrecording gages at various sites within 1 mi (2 km) of present site at different datums.

AVERAGE DISCHARGE.--54 years (1916-26, 1929-73), 790 ft³/s (22.4 m³/s), 63.48 in/yr (1,612 mm/yr), 572,400 acre-ft/yr (706 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,850 ft³/s (251 m³/s) Dec. 22, gage height, 9.73 ft (2.966 m); minimum, 16 ft³/s (0.45 m³/s) Sept. 5, 6.

Period of record: Maximum discharge, 48,900 ft³/s (1,380 m³/s) Dec. 22, 1964, gage height, 26.51 ft (8.080 m), from floodmarks, from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of contracted-opening measurement at gage height 18.14 ft (5.529 m) and slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) Sept. 22-25, 27-30, 1939, Oct. 5, 1961.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1184: 1946(M). WSP 1448: 1917-18(M), 1919, 1920(M), 1925.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	35	175	767	1.060	1.510	1.880	233	88	49	24	20
2	26	51	160	736	881	1.330	1.600	221	85	46	24	19
3	25	148	315	725	755	1.130	1.300	206	83	45	23	18
4	25	378	308	660	676	987	1.130	218	81	44	23	17
5	24	284	250	595	761	849	1.050	203	78	43	23	17
6	23	287	271	540	843	799	925	188	73	43	22	17
7	23	434	223	484	731	682	780	183	71	41	23	20
8	23	333	170	447	649	601	666	172	68	40	22	21
9	23	287	160	422	606	540	584	165	66	39	22	20
10	40	494	150	434	649	749	522	155	64	38	22	19
11	91	454	150	979	638	862	466	148	63	37	23	19
12	58	305	163	3.790	755	799	426	141	63	36	22	18
13	44	226	165	5.320	720	919	390	136	69	36	21	18
14	37	185	148	3.190	649	1.010	354	129	66	34	21	17
15	34	150	153	2.410	579	944	321	122	69	34	21	18
16	31	137	2.530	4.990	517	979	303	118	68	33	20	18
17	30	129	7.060	3.830	480	1.080	434	114	120	33	20	18
18	29	163	4.630	3.200	443	972	457	110	118	31	20	20
19	28	914	3.990	2.710	402	2.260	611	106	90	31	20	33
20	28	795	2.540	1.910	366	2.090	660	104	78	33	20	183
21	28	486	2.850	1.660	338	1.660	606	100	69	34	19	155
22	28	402	7.050	1.310	317	1.350	563	98	64	34	19	106
23	27	315	4.580	1.050	297	1.130	508	96	61	32	19	272
24	27	262	4.540	1.750	335	1.050	438	180	60	31	20	466
25	26	220	2.530	2.640	2.180	1.020	390	188	57	30	21	362
26	26	205	1.590	1.830	1.680	919	350	139	59	29	23	188
27	26	229	1.950	1.340	1.400	849	314	120	57	28	21	129
28	34	215	1.930	1.040	1.090	912	290	110	53	27	21	98
29	52	213	1.490	906	------	862	265	102	51	26	21	83
30	49	193	1.140	1.100	------	979	247	96	50	25	20	71
31	40	------	925	1.350	------	1.460	------	94	------	25	20	------
TOTAL	1.031	8.929	54.286	54.115	20.797	33.283	18.830	4.495	2.142	1.087	660	2.480
MEAN	33.3	298	1.751	1.746	743	1.074	628	145	71.4	35.1	21.3	82.7
MAX	91	914	7.060	5.320	2.180	2.260	1.880	233	120	49	24	466
MIN	23	35	148	422	297	540	247	94	50	25	19	17
CFSM	.20	1.76	10.4	10.3	4.40	6.36	3.72	.86	.42	.21	.13	.49
IN.	.23	1.97	11.95	11.91	4.58	7.33	4.14	.99	.47	.24	.15	.55
AC-FT	2.040	17.710	107.700	107.300	41.250	66.020	37.350	8.920	4.250	2.160	1.310	4.920

CAL YR 1972 TOTAL 302.463 MEAN 826 MAX 15.000 MIN 18 CFSM 4.89 IN 66.58 AC-FT 599.900
WTR YR 1973 TOTAL 202.135 MEAN 554 MAX 7.060 MIN 17 CFSM 3.28 IN 44.49 AC-FT 400.900

PEAK DISCHARGE (BASE, 9,300 CFS).--No peak above base.

14326800 NORTH FORK COQUILLE RIVER NEAR FAIRVIEW, OREG.

LOCATION.--Lat 43°10'45", long 124°05'10", in NE¼NE¼ sec.2, T.28 S., R.12 W., Coos County, on right bank 0.7 mi (1.1 km) downstream from Lost Creek, 2.6 mi (4.2 km) south of Fairview, and at mile 21.7 (34.9 km).

DRAINAGE AREA.--74.0 mi² (191.7 km²).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 63.34 ft (19.306 m) above mean sea level (from stadia survey).

AVERAGE DISCHARGE.--10 years, 298 ft³/s (8.44 m³/s), 54.69 in/yr (1,389 mm/yr), 215,900 acre-ft/yr (266 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,270 ft³/s (64.3 m³/s) Dec. 17, gage height, 9.84 ft (2.999 m); minimum, 3.5 ft³/s (0.099 m³/s) Aug. 21-23.

Period of record: Maximum discharge, 7,760 ft³/s (220 m³/s) Mar. 2, 1972, gage height, 18.03 ft (5.496 m); minimum, 2.0 ft³/s (0.057 m³/s) Sept. 9, 10, 1967.

REMARKS.--Records fair. No regulation. Several diversions for irrigation by pumping above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	13	88	393	309	365	672	95	33	16	4.4	6.8
2	6.4	13	85	369	271	356	536	88	32	15	4.0	6.8
3	6.4	31	178	369	246	318	431	84	31	15	3.8	6.8
4	6.0	110	161	353	232	292	365	88	31	14	3.8	5.6
5	6.0	104	129	331	222	269	312	83	28	14	3.8	5.2
6	4.8	55	157	331	203	257	277	72	26	12	3.8	4.0
7	4.8	60	135	289	188	232	246	70	26	13	4.0	5.6
8	4.4	71	100	266	168	208	222	68	25	13	4.4	9.0
9	4.4	65	100	271	152	193	200	68	24	13	4.8	8.5
10	6.0	289	95	274	148	488	182	65	23	13	5.2	6.8
11	10	146	100	396	146	676	164	60	23	12	5.6	5.6
12	10	91	100	700	200	520	148	57	23	12	6.4	4.8
13	10	70	105	1.540	185	492	154	54	27	11	6.4	3.6
14	10	56	95	1.000	173	470	139	54	26	11	6.4	3.6
15	11	50	88	684	161	393	125	51	26	10	5.6	3.8
16	9.5	44	286	764	148	382	127	50	30	9.5	5.2	3.8
17	8.5	41	1.710	764	150	480	188	48	60	9.5	4.4	3.8
18	7.2	45	1.650	696	144	435	227	46	68	9.5	4.0	4.4
19	7.2	369	924	680	131	660	306	45	43	9.5	3.8	9.0
20	6.8	295	804	592	123	748	254	45	33	10	3.8	23
21	7.2	173	896	572	120	692	214	44	29	11	3.6	60
22	7.6	146	1.640	473	116	624	188	43	26	11	3.6	52
23	8.0	116	1.400	407	109	504	166	46	25	11	4.0	135
24	7.6	100	1.700	424	125	424	150	63	24	9.0	6.8	249
25	6.8	88	860	488	592	356	135	74	23	8.0	9.5	271
26	6.4	161	628	438	386	306	127	56	25	7.2	10	98
27	6.8	195	1.340	379	318	286	118	51	24	7.2	7.6	60
28	8.0	133	1.160	328	277	286	110	50	21	6.4	7.2	44
29	17	116	788	300	------	249	102	42	19	6.0	7.2	34
30	26	98	612	309	------	269	100	37	18	5.2	6.4	28
31	15	------	480	365	------	403	------	35	------	4.8	6.4	------
TOTAL	256.6	3.344	18.594	15.545	5.743	12.633	6.685	1.832	872	328.8	165.9	1.161.5
MEAN	8.28	111	600	501	205	408	223	59.1	29.1	10.6	5.35	38.7
MAX	20	369	1.710	1.540	592	748	672	95	68	16	10	271
MIN	4.4	13	85	266	109	193	100	35	18	4.8	3.6	3.6
CFSM	.11	1.50	8.11	6.77	2.77	5.51	3.01	.80	.39	.14	.07	.52
IN.	.13	1.68	9.35	7.81	2.89	6.35	3.36	.92	.44	.17	.08	.58
AC-FT	509	6.630	36.880	30.830	11.390	25.060	13.260	3.630	1.730	652	329	2.300

WTR YR 1973 TOTAL 67.160.8 MEAN 184 MAX 1.710 MIN 3.6 CFSM 2.49 IN 33.76 AC-FT 133.200

PEAK DISCHARGE (BASE, 3,000 CFS).--No peak above base.

14328000 ROGUE RIVER ABOVE PROSPECT, OREG.

LOCATION.--Lat 42°46'30", long 122°29'55", in SE¼NE¼ sec.19, T.32 S., R.3 E., Jackson County, on left bank 1.4 mi (2.3 km) upstream from Pacific Power & Light Co. diversion dam, 1.8 mi (2.9 km) northwest of Prospect, and at mile 173.4 (279.0 km).

DRAINAGE AREA.--312 mi^2 (808 km^2).

PERIOD OF RECORD.--January 1908 to February 1912, October 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to October 1925, published as "near Prospect."

GAGE.--Water-stage recorder. Altitude of gage is 2,620 ft (799 m), from river-profile map Prior to Feb. 17, 1912, nonrecording gage at several sites within a few hundred feet upstream at various datums.

AVERAGE DISCHARGE.--53 years (1908-11, 1923-73), 816 ft^3/s (23.1 m^3/s), 35.52 in/yr (902 mm/yr), 591,200 acre-ft/yr (729 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,670 ft^3/s (75.6 m^3/s) Dec. 22, gage height, 3.96 ft (1.207 m); minimum, 364 ft^3/s (10.3 m^3/s) Sept. 12, 16, 17.

Period of record: Maximum discharge, 22,400 ft^3/s (634 m^3/s) Dec. 22, 1964, gage height, 11.55 ft (3.520 m), from floodmark, from rating curve extended above 9,000 ft^3/s (255 m^3/s) on basis of slope-area measurement at 16,600 ft^3/s (470 m^3/s); minimum observed, 200 ft^3/s (5.66 m^3/s) Nov. 20, 1931.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1248: 1925, 1927(M). WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	580	589	589	738	680	936	678	994	638	449	373	377
2	578	636	583	738	677	856	663	993	620	445	373	381
3	575	636	560	710	670	828	679	1,020	602	440	369	381
4	574	771	530	644	671	795	703	1,030	585	440	373	381
5	571	734	500	656	716	764	772	968	574	431	373	377
6	568	629	490	648	731	763	836	976	568	431	373	381
7	568	616	480	573	722	740	823	944	563	426	369	390
8	568	615	470	620	721	735	807	944	552	426	373	386
9	581	603	460	698	725	734	842	936	546	422	373	386
10	670	615	460	686	754	987	881	913	535	422	373	386
11	744	596	460	707	744	975	940	892	530	417	373	381
12	633	581	460	1,300	734	880	985	920	519	417	373	381
13	633	581	460	1,800	709	845	1,110	992	514	413	373	386
14	601	568	480	1,600	718	797	1,040	1,060	509	408	373	381
15	602	563	550	1,300	718	771	1,000	1,080	509	408	369	386
16	586	563	674	1,680	705	768	1,040	1,060	519	399	373	381
17	580	557	891	1,450	716	755	1,230	1,050	602	399	373	381
18	576	564	1,060	1,250	704	729	1,070	1,020	574	399	373	386
19	573	589	1,200	1,100	690	734	1,000	944	541	395	373	404
20	570	570	1,150	1,000	677	723	953	878	514	408	373	435
21	568	571	1,380	946	673	720	943	815	504	404	373	417
22	566	575	2,420	881	672	701	976	773	493	395	373	413
23	563	563	1,730	848	669	687	1,000	752	499	395	373	530
24	559	560	1,570	831	681	695	1,000	878	478	390	381	590
25	557	565	1,180	823	731	708	1,020	985	478	390	413	557
26	557	803	1,030	739	757	723	1,120	759	478	390	390	440
27	554	762	984	751	799	711	1,230	710	469	381	386	413
28	571	659	913	741	792	696	1,180	686	459	381	381	404
29	567	627	850	720	------	675	1,090	674	454	377	386	395
30	558	601	815	719	------	697	1,020	674	449	377	381	390
31	562	------	773	702	------	686	------	668	------	373	381	------
TOTAL	18,113	18,462	26,152	28,599	19,956	23,814	28,631	27,888	15,875	12,648	11,666	12,277
MEAN	584	615	844	923	713	768	954	900	529	408	376	409
MAX	744	803	2,420	1,800	799	987	1,230	1,080	638	449	413	590
MIN	554	557	460	573	669	675	663	668	449	373	369	377
CFSM	1.87	1.97	2.71	2.96	2.29	2.46	3.06	2.88	1.70	1.31	1.21	1.31
IN.	2.16	2.20	3.12	3.41	2.38	2.84	3.41	3.33	1.89	1.51	1.39	1.46
AC-FT	35,930	36,620	51,870	56,730	39,580	47,240	56,790	55,320	31,490	25,090	23,140	24,350

CAL YR 1972 TOTAL 439,623 MEAN 1,201 MAX 6,600 MIN 460 CFSM 3.85 IN 52.42 AC-FT 872,000
WTR YR 1973 TOTAL 244,081 MEAN 669 MAX 2,420 MIN 369 CFSM 2.14 IN 29.10 AC-FT 484,100

PEAK DISCHARGE (BASE, 2,700 CFS).--No peak above base.

14330000 ROGUE RIVER BELOW PROSPECT, OREG.

LOCATION.--Lat 42°43'50", long 122°30'55", in SE¼NW¼ sec.6, T.33 S., R.3 E., Jackson County, on right bank 500 ft (152 m) downstream from Prospect No. 1 powerplant, 1.4 mi (2.3 km) downstream from Mill Creek, 2.0 mi (3.2 km) southwest of Prospect, 2.1 mi (3.4 km) upstream from South Fork Rogue River, and at mile 169.4 (272.6 km).

DRAINAGE AREA.--379 mi² (982 km²).

PERIOD OF RECORD.--August 1913 to September 1930, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,970 ft (600 m), from topographic map. Prior to September 1927 nonrecording gage at site 1,000 ft (305 m) upstream, above powerplants, at different datum, also concurrent nonrecording gage on headrace to obtain equivalent combined flow.

AVERAGE DISCHARGE.--22 years, 1,158 ft³/s (32.8 m³/s), 839,000 acre-ft/yr (1,034 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,310 ft³/s (93.7 m³/s) Dec. 22, gage height, 4.01 ft (1.222 m); minimum, 504 ft³/s (14.3 m³/s) Dec. 8, regulated.

Period of record: Maximum discharge, 10,900 ft³/s (309 m³/s) Jan. 18, 1971; minimum, 455 ft³/s (12.9 m³/s) Oct. 13, 19, 20, 23-25, 1924.

Maximum stage since at least 1890, 12.4 ft (3.78 m) Dec. 22, 1964, from floodmarks, discharge, 25,000 ft³/s (708 m³/s), from records for station above Prospect (see station 14328000) and for station below South Fork Rogue River near Prospect (see station 14335000) after adjusting for estimated intervening tributary inflow.

REMARKS.--Records good. Small fluctuations caused by powerplants 500-800 ft (152-244 m) above station. Small diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1518: 1914-23, 1924(M), 1925, 1928.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,210	1,230	1,220	1,340	1,380	1,640	1,410	1,800	1,400	1,120	988	940
2	1,210	1,280	1,210	1,340	1,380	1,570	1,400	1,800	1,370	1,110	988	929
3	1,210	1,240	1,250	1,320	1,380	1,540	1,400	1,820	1,350	1,110	970	929
4	1,200	1,430	1,180	1,270	1,370	1,500	1,440	1,860	1,320	1,100	988	929
5	1,190	1,370	1,100	1,300	1,430	1,460	1,520	1,770	1,320	1,080	982	918
6	1,190	1,250	1,070	1,320	1,470	1,450	1,600	1,770	1,310	1,080	976	924
7	1,190	1,250	1,020	1,180	1,450	1,420	1,580	1,740	1,300	1,080	976	929
8	1,190	1,250	980	1,210	1,440	1,420	1,560	1,740	1,280	1,080	964	918
9	1,210	1,230	960	1,370	1,440	1,410	1,610	1,730	1,270	1,070	958	918
10	1,280	1,240	960	1,370	1,470	1,700	1,660	1,700	1,250	1,070	964	885
11	1,360	1,220	960	1,400	1,460	1,700	1,720	1,680	1,250	1,060	958	852
12	1,250	1,200	960	1,980	1,440	1,590	1,760	1,700	1,250	1,060	952	869
13	1,230	1,210	970	2,500	1,400	1,560	1,910	1,770	1,250	1,060	946	907
14	1,230	1,200	1,030	2,360	1,400	1,500	1,820	1,860	1,230	1,040	946	913
15	1,230	1,190	1,130	2,080	1,410	1,470	1,780	1,880	1,230	1,040	946	918
16	1,240	1,190	1,230	2,310	1,390	1,450	1,720	1,870	1,240	1,040	940	918
17	1,250	1,170	1,470	2,060	1,400	1,450	1,800	1,850	1,350	1,020	940	918
18	1,240	1,190	1,610	1,900	1,380	1,400	1,610	1,840	1,320	1,030	940	924
19	1,240	1,230	1,890	1,860	1,360	1,400	1,620	1,750	1,260	1,020	946	940
20	1,240	1,210	1,840	1,720	1,360	1,390	1,750	1,670	1,230	1,050	946	1,020
21	1,230	1,200	1,970	1,680	1,370	1,390	1,740	1,600	1,220	1,040	940	964
22	1,230	1,210	2,990	1,600	1,370	1,370	1,770	1,560	1,200	1,020	946	970
23	1,230	1,190	2,380	1,590	1,360	1,350	1,800	1,530	1,200	1,020	946	1,110
24	1,230	1,180	2,270	1,560	1,360	1,360	1,790	1,650	1,180	1,010	952	1,200
25	1,210	1,180	1,880	1,560	1,420	1,380	1,820	1,690	1,170	1,020	988	1,240
26	1,170	1,410	1,690	1,460	1,450	1,400	1,920	1,540	1,170	994	952	1,020
27	1,170	1,400	1,630	1,470	1,480	1,380	2,040	1,480	1,140	1,010	935	988
28	1,190	1,290	1,580	1,460	1,470	1,360	2,000	1,440	1,140	1,010	940	964
29	1,180	1,270	1,480	1,440	------	1,340	1,920	1,420	1,130	1,000	946	952
30	1,170	1,230	1,440	1,430	------	1,360	1,820	1,410	1,130	1,000	952	952
31	1,180	------	1,400	1,420	------	1,430	------	1,400	------	976	940	------
TOTAL	37,780	37,340	44,750	49,860	39,490	45,140	51,290	52,320	37,460	32,420	29,651	28,758
MEAN	1,219	1,245	1,444	1,608	1,410	1,456	1,710	1,688	1,249	1,046	956	959
MAX	1,360	1,430	2,990	2,500	1,480	1,700	2,040	1,880	1,400	1,120	988	1,240
MIN	1,170	1,170	960	1,180	1,360	1,340	1,400	1,400	1,130	976	935	852
AC-FT	74,940	74,060	88,760	98,900	78,330	89,540	101,700	103,800	74,300	64,310	58,810	57,040

CAL YR 1972 TOTAL 692,640 MEAN 1,892 MAX 7,780 MIN 960 AC-FT 1,374,000
WTR YR 1973 TOTAL 486,259 MEAN 1,332 MAX 2,990 MIN 852 AC-FT 964,500

14332000 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OREG.

LOCATION.--Lat 42°42'30", long 122°23'30", in SE¼SW¼ sec.7, T.33 S., R.4 E., Jackson County, on left bank 0.3 mi (0.5 km) downstream from South Fork dam and intake of South Fork power canal. 0.31 mi (0.50 km) downstream from Imnaha Creek. 5.6 mi (9.0 km) southeast of Prospect, and at mile 10.2 (16.4 km).

DRAINAGE AREA.--83.8 mi^2 (217 km^2). Area at site above Imnaha Creek used October 1931 to September 1949, 61.3 mi^2 (158.8 km^2), and Imnaha Creek near Prospect, 22.2 mi^2 (57.5 km^2).

PERIOD OF RECORD.--April 1924 to September 1931, October 1949 to current year. Equivalent records for period October 1931 to September 1949 may be obtained from combined flow of South Fork Rogue River above Imnaha Creek, near Prospect and Imnaha Creek near Prospect.

GAGE.--Water-stage recorder. Altitude of gage is 3,300 ft (1,006 m), from topographic map. Prior to Sept. 10, 1965, at site 1,000 ft (305 m) upstream at different datum.

AVERAGE DISCHARGE.--49 years (1924-73), 178 ft^3/s (5.04 m^3/s), 129,000 acre-ft/yr (159 hm^3/yr).

EXTREMES (River only).--Current year: Maximum discharge, 258 ft^3/s (7.31 m^3/s) Dec. 22, gage height, 2.57 ft (0.783 m); minimum daily, 0.13 ft^3/s (0.004 m^3/s) Nov. 17-25.

Period of record: Maximum discharge, 7,010 ft^3/s (199 m^3/s) Dec. 22, 1964, gage height, 11.1 ft (3.38 m), from floodmark; no flow Jan. 31, 1950, Sept. 29, 30, 1967 (entire flow diverted to canal).

(Combined flow).--Current year: Maximum discharge, 408 ft^3/s (11.6 m^3/s) May 15; minimum daily, 72 ft^3/s (2.04 m^3/s) Sept. 30.

Period of record: Maximum discharge, 7,010 ft^3/s (199 m^3/s) Dec. 22, 1964 (no flow in canal), from rating curve extended above 410 ft^3/s (11.6 m^3/s) on basis of measurement of flow over dam of 3,180 ft^3/s (90.1 m^3/s); minimum daily, about 35 ft^3/s (0.99 m^3/s) in September 1931.

REMARKS.--Records good. All records given herein include flow in South Fork power canal (completed in March 1932) which diverts 1,500 ft (457 m) above station and returns water to Rogue River above South Fork Rogue River; practically no storage above diversion dam.

REVISIONS (WATER YEARS).--WSP 1318: 1925(M), 1927(M), 1930(M). WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	109	104	142	140	172	155	212	169	103	84	75
2	107	114	101	139	138	160	153	218	159	101	84	75
3	107	115	105	135	136	160	153	223	154	99	84	74
4	106	131	100	125	134	158	154	242	151	98	84	74
5	106	135	96	127	141	155	158	228	145	98	84	74
6	105	119	99	126	139	153	163	223	140	96	84	74
7	105	114	95	117	136	152	163	222	137	96	84	77
8	104	114	95	119	136	150	164	226	135	93	84	74
9	115	110	95	121	137	152	170	229	133	95	84	73
10	137	108	100	121	140	217	173	223	130	97	84	74
11	148	105	110	127	140	210	182	222	127	97	84	73
12	125	104	119	293	140	193	189	233	125	95	83	78
13	119	101	119	318	137	186	198	261	124	94	82	76
14	115	100	118	275	139	180	192	316	121	92	82	76
15	113	99	113	243	137	176	194	380	121	92	81	77
16	111	98	109	247	136	177	213	366	122	92	81	75
17	109	97	174	235	135	172	298	366	132	91	80	75
18	109	98	147	220	134	171	235	358	131	89	80	75
19	108	102	175	205	132	171	216	315	122	91	80	78
20	107	99	205	193	131	167	207	255	119	91	79	80
21	106	100	234	187	130	166	199	222	117	90	79	76
22	105	98	381	176	129	161	202	206	115	90	79	77
23	105	96	326	171	130	160	204	201	114	89	78	98
24	104	95	322	168	134	155	210	285	113	88	79	108
25	103	96	241	162	138	154	215	315	112	87	80	108
26	102	131	211	155	145	154	234	225	111	86	79	82
27	102	141	199	154	148	152	250	200	109	86	78	76
28	106	120	182	153	154	151	256	187	108	86	77	74
29	104	112	165	149	------	152	233	182	106	86	77	73
30	102	107	156	148	------	158	224	177	105	85	75	72
31	103	------	150	143	------	156	------	175	------	84	75	------
TOTAL	3,406	3,268	4,946	5,394	3,846	5,151	5,957	7,693	3,807	2,857	2,508	2,351
MEAN	110	109	160	174	137	166	199	248	127	92.2	80.9	78.4
MAX	148	141	381	318	154	217	298	380	169	103	84	108
MIN	102	95	95	117	129	150	153	175	105	84	75	72
AC-FT	6,760	6,480	9,810	10,700	7,630	10,220	11,820	15,260	7,550	5,670	4,970	4,660

CAL YR 1972 TOTAL 109,868 MEAN 300 MAX 2,510 MIN 95 AC-FT 217,900
WTR YR 1973 TOTAL 51,184 MEAN 140 MAX 381 MIN 72 AC-FT 101,500

14333500 RED BLANKET CREEK NEAR PROSPECT, OREG.

LOCATION.--Lat 42°46'40", long 122°25'35", in NW¼NE¼ sec.23, T.32 S., R.3 E., Jackson County, on right bank 1.8 mi (2.9 km) downstream from Lick Creek, 3.7 mi (6.0 km) northeast of Prospect, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--45.5 mi² (117.8 km²).

PERIOD OF RECORD.--May 1925 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,780 ft (847 m), from river-profile map. Prior to Sept. 7, 1949, nonrecording gage at several sites within 2.5 mi (4.0 km) of present site at various datums.

AVERAGE DISCHARGE.--48 years, 116 ft³/s (3.29 m³/s), 84,040 acre-ft/yr (104 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 369 ft³/s (10.5 m³/s) Dec. 22, gage height, 3.44 ft (1.049 m); minimum, 36 ft³/s (1.02 m³/s) Dec. 13, result of freezeup.
Period of record: Maximum discharge, 3,190 ft³/s (90.3 m³/s) Dec. 22, 1964, gage height, 7.85 ft (2.393 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); minimum observed, 34 ft³/s (0.96 m³/s) Sept. 3, 4, 25, Oct. 9, 16, 1931.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No regulation. Small diversion above station for irrigation below.

REVISIONS (WATER YEARS).--WSP 1318: 1926-28, 1930. WSP 1348: 1943(M), 1948(M), 1953. WSP 1738: 1927(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	91	86	116	103	119	103	126	130	90	65	59
2	83	91	86	114	103	106	100	127	120	85	65	59
3	83	98	93	11[illegible]	103	106	100	132	110	85	65	59
4	83	131	84	106	103	105	100	137	110	85	65	58
5	82	106	82	103	116	102	104	129	110	85	64	58
6	82	96	84	101	111	102	106	130	105	80	64	58
7	82	96	82	103	108	99	105	131	105	80	64	62
8	82	96	70	111	108	98	105	134	104	80	64	60
9	91	93	60	98	108	98	107	134	102	80	64	58
10	110	91	55	101	108	133	106	135	100	80	63	58
11	127	88	50	113	106	124	108	130	98	80	63	58
12	95	86	45	231	108	117	114	130	97	75	63	57
13	93	88	62	248	103	114	120	140	95	75	62	56
14	90	86	82	215	104	109	115	160	94	75	62	57
15	90	84	78	188	102	106	112	180	93	75	62	57
16	82	84	84	215	100	108	121	170	97	75	61	56
17	86	84	160	192	99	106	143	150	103	75	61	56
18	86	86	170	177	98	106	127	140	98	70	62	57
19	86	93	204	157	96	107	122	140	95	70	61	61
20	84	88	204	146	95	106	116	140	95	70	61	68
21	84	88	227	140	94	107	113	150	95	70	61	61
22	84	86	320	134	94	105	114	140	95	70	61	67
23	82	84	248	125	93	103	117	140	95	70	61	86
24	82	82	231	122	93	101	118	140	95	70	63	98
25	82	86	195	122	93	102	121	160	90	70	63	82
26	82	125	163	113	97	102	130	150	90	65	62	69
27	82	108	157	111	96	102	141	150	90	65	61	66
28	84	98	143	111	103	100	141	150	90	65	61	64
29	82	93	131	108	------	98	134	140	90	65	60	64
30	82	88	125	111	------	107	128	140	90	65	60	63
31	82	------	119	106	------	105	------	130	------	65	60	------
TOTAL	2,689	2,794	3,970	4,251	2,845	3,303	3,491	4,385	2,981	2,310	1,934	1,892
MEAN	86.7	93.1	128	137	102	107	116	141	99.4	74.5	62.4	63.1
MAX	127	131	320	248	116	133	143	180	130	90	65	98
MIN	82	82	45	98	93	98	100	126	90	65	60	56
AC-FT	5,330	5,540	7,870	8,430	5,640	6,550	6,920	8,700	5,910	4,580	3,840	3,750

CAL YR 1972 TOTAL 61,331 MEAN 168 MAX 971 MIN 45 AC-FT 121,700
WTR YR 1973 TOTAL 36,845 MEAN 101 MAX 320 MIN 45 AC-FT 73,080

PEAK DISCHARGE (BASE, 300 CFS).--Dec. 22 (0230) 369 cfs (3.44 ft).

NOTE.--No gage-height record June 19 to Aug. 1.

14334700 SOUTH FORK ROGUE RIVER, SOUTH OF PROSPECT, OREG.

LOCATION.--Lat 42°42'45", long 122°30'20", in NW¼SE¼ sec.7, T.33 S., R.3 E., Jackson County, on right bank 200 ft (61 m) upstream from unnamed tributary, 0.6 mi (1.0 km) upstream from Smith Creek, 1.2 mi (1.9 km) downstream from Beaver Creek, 2.8 mi (4.5 km) southwest of Prospect, and at mile 2.4 (3.9 km).

DRAINAGE AREA.--246 mi² (637 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,030 ft (619 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 423 ft³/s (12.0 m³/s), 306,500 acre-ft/yr (378 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,390 ft³/s (39.4 m³/s) Dec. 22, gage height, 6.61 ft (2.015 m); minimum, 62 ft³/s (1.76 m³/s) Sept. 17.

Period of record: Maximum discharge, 9,880 ft³/s (280 m³/s) Mar. 3, 1972, gage height, 12.71 ft (3.874 m), from floodmark; minimum daily, 54 ft³/s (1.53 m³/s) Sept. 24-30, 1970.

Maximum stage since at least 1890, 20.1 ft (6.13 m), Dec. 22, 1964, from floodmarks at gage, discharge, 28,500 ft³/s (807 m³/s).

REMARKS.--Records good. Some regulation by South Fork power canal dam upstream. Power diversions above station from South Fork Rogue River, Middle Fork Rogue River, and Red Blanket Creek divert water to Rogue River via Main Canal. During summer base flow all of streamflow is diverted for power except that for fish life. Base flow at station is principally from springs downstream from power diversions. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	151	139	330	245	284	257	338	273	103	77	67
2	149	166	136	323	240	240	239	339	243	101	74	66
3	148	162	172	292	234	239	234	356	229	100	73	66
4	149	252	145	257	229	245	232	398	219	99	72	65
5	147	242	142	247	264	234	239	357	202	98	72	65
6	145	182	139	237	258	236	249	343	184	98	75	65
7	145	157	133	231	253	230	245	343	180	98	74	68
8	145	157	115	239	249	235	237	361	175	98	72	67
9	162	151	111	208	246	232	242	370	174	102	71	66
10	267	148	111	204	249	402	245	352	170	96	71	81
11	349	145	111	219	244	422	253	347	152	95	71	128
12	211	140	122	682	252	379	271	383	136	94	70	119
13	188	142	143	826	234	371	306	455	134	94	70	68
14	173	139	131	713	235	341	296	545	128	93	69	68
15	153	137	147	628	229	325	288	620	125	93	69	65
16	148	136	136	821	221	325	435	619	128	93	69	64
17	147	132	317	861	219	323	731	633	152	93	69	63
18	147	137	461	711	213	308	690	635	150	92	69	65
19	143	166	615	532	210	309	559	571	135	93	69	71
20	142	156	656	480	199	298	315	490	120	91	68	80
21	140	142	798	458	176	302	303	416	117	90	68	72
22	139	137	1,300	408	174	287	301	380	115	88	68	74
23	139	134	990	359	172	273	306	365	114	88	69	110
24	137	133	930	348	172	258	311	549	113	87	71	129
25	136	137	698	356	171	242	320	575	112	86	74	129
26	136	281	599	307	182	239	375	413	110	85	71	89
27	134	288	563	287	207	237	419	347	108	80	69	76
28	145	203	509	279	219	216	435	320	106	79	68	73
29	143	153	439	273	------	208	397	306	105	78	67	70
30	139	144	393	270	------	261	356	307	104	78	67	69
31	137	------	355	258	------	276	------	300	------	77	67	------
TOTAL	4,935	4,950	11,756	12,644	6,196	8,777	10,086	13,133	4,513	2,840	2,183	2,358
MEAN	159	165	379	408	221	283	336	424	150	91.6	70.4	78.6
MAX	349	288	1,300	861	264	422	731	635	273	103	77	129
MIN	134	132	111	204	171	208	232	300	104	77	67	63
AC-FT	9,790	9,820	23,320	25,080	12,290	17,410	20,010	26,050	8,950	5,630	4,330	4,680

CAL YR 1972 TOTAL 244,024 MEAN 667 MAX 8,00[illegible] MIN 111 AC-FT [illegible]
WTR YR 1973 TOTAL 84,371 MEAN 231 MAX 1,300 MIN 63 AC-FT 167,300

14335500 SOUTH FORK BIG BUTTE CREEK NEAR BUTTE FALLS, OREG.

LOCATION.--Lat 42°32'25", long 122°33'15", in NE¼SW¼ sec.11, T.35 S., R.2 E., Jackson County, on right bank 10 ft (3 m) downstream from Ginger Creek, 0.6 mi (1.0 km) east of town of Butte Falls, and at mile 14.0 (22.5 km).

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--September 1910 to October 1911 (published as "at Butte Falls"), August to October 1915, October 1917 to September 1922, March 1925 to current year. Monthly discharge only August, September 1915, published in WSP 1318.

GAGE.--Water-stage recorder. Concrete control since Oct. 1, 1968. Altitude of gage is 2,360 ft (719 m), from river-profile map. Sept. 21, 1910, to Sept. 30, 1922, nonrecording gage at site 300 ft (91 m) upstream at different datums.

AVERAGE DISCHARGE.--54 years (1910-11, 1917-22, 1925-73), 160 ft³/s (4.53 m³/s), 115,900 acre-ft/yr (143 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 313 ft³/s (8.86 m³/s) Jan. 12, gage height, 1.77 ft (0.539 m); minimum, 53 ft³/s (1.50 m³/s) Sept. 27.

Period of record: Maximum discharge, 12,600 ft³/s (357 m³/s) Dec. 22, 1964, gage height, 7.65 ft (2.332 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flow; minimum, 33 ft³/s (0.93 m³/s) Oct. 2, 1968.

REMARKS.--Records good. Flow slightly regulated since 1952 by Willow Creek Reservoir, capacity, 7,320 acre-ft (9.03 hm³). Diversions for irrigation above station and for municipal water supply for Medford (since 1927) and Butte Falls.

REVISIONS (WATER YEARS).--WSP 1288: 1911, 1918-19, 1921-22, 1929. WSP 1318: 1918-19. WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	100	96	118	123	110	166	113	91	81	73	75
2	98	100	96	121	123	100	157	110	89	79	73	73
3	98	103	110	118	118	103	151	106	87	77	75	73
4	98	137	103	110	118	108	145	116	83	77	73	73
5	98	118	98	110	123	106	145	116	83	79	73	71
6	96	103	100	110	123	106	142	108	85	81	73	69
7	96	100	98	100	123	103	137	106	85	81	71	73
8	96	118	87	100	121	110	132	106	85	81	73	75
9	100	106	91	108	121	113	129	103	85	81	75	73
10	116	100	91	110	121	163	126	100	85	79	75	73
11	118	98	91	113	121	189	126	98	83	81	75	69
12	103	98	96	253	126	178	126	96	83	81	75	69
13	100	98	93	242	116	172	140	96	85	81	75	69
14	100	98	93	217	113	157	129	100	85	77	73	73
15	100	96	93	200	110	145	123	106	83	71	75	73
16	98	96	116	200	106	145	126	100	85	71	73	73
17	98	96	145	196	106	151	154	100	89	71	73	73
18	98	98	137	186	103	145	148	98	87	71	71	75
19	96	116	172	172	100	142	148	98	79	73	73	77
20	96	110	160	157	100	137	142	96	79	75	73	67
21	96	103	160	160	98	140	137	91	81	75	69	59
22	93	100	238	151	98	132	137	87	79	75	71	73
23	93	98	196	142	96	126	137	87	81	75	75	83
24	93	98	203	142	100	123	132	106	83	75	77	87
25	93	98	169	142	96	121	129	106	83	75	77	79
26	93	106	148	132	98	118	129	93	83	75	77	63
27	93	106	154	129	96	116	129	91	81	75	75	59
28	94	100	145	134	96	118	126	109	81	75	73	57
29	95	100	132	129	------	113	123	87	81	75	73	57
30	96	98	126	126	------	148	118	93	81	73	73	57
31	98	------	123	129	------	169	------	96	------	75	73	------
TOTAL	3.038	3.096	3.960	4.557	3.093	4.107	4.089	3.118	2.510	2.371	2.283	2.120
MEAN	98.0	103	128	147	110	132	136	101	83.7	76.5	73.6	70.7
MAX	118	137	238	253	126	189	166	116	91	81	77	87
MIN	93	96	87	100	96	100	118	87	79	71	69	57
AC-FT	6.030	6.140	7.850	9.040	6.130	8.150	8.110	6.180	4.980	4.700	4.530	4.210

CAL YR 1972 TOTAL 90.384 MEAN 247 MAX 3.540 MIN 87 AC-FT 179.300
WTR YR 1973 TOTAL 38.342 MEAN 105 MAX 253 MIN 57 AC-FT 76.050

PEAK DISCHARGE (BASE, 450 CFS).--No peak above base.

14337500 BIG BUTTE CREEK NEAR MCLEOD, OREG.

LOCATION.--Lat 42°39'05", long 122°41'25", in NE¼NW¼ sec.3, T.35 S., R.1 E., Jackson County, on right bank 225 ft (69 m) upstream from county road bridge, 0.9 mi (1.4 km) south of McLeod, and at mile 0.64 (1.03 km).

DRAINAGE AREA.--245 mi^2 (635 km^2).

PERIOD OF RECORD.--October 1945 to September 1957. October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,525.95 ft (465.110 m) above mean sea level. Oct. 9, 1945, to Sept. 30, 1957, nonrecording gage at site 260 ft (79 m) downstream at datum 0.53 ft (0.162 m) higher.

AVERAGE DISCHARGE.--18 years, 308 ft^3/s (8.72 m^3/s), 223,100 acre-ft/yr (275 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,180 ft^3/s (33.4 m^3/s) Jan. 12, gage height, 3.43 ft (1.655 m); minimum, 40 ft^3/s (1.13 m^3/s) Aug. 28.

Period of record: Maximum discharge, 8,930 ft^3/s (253 m^3/s) Dec. 22, 1955, gage height, 12.75 ft (3.886 m), site and datum then in use, from rating curve extended above 3,300 ft^3/s (93.5 m^3/s) on basis of slope-area measurement of peak flow; minimum, 29 ft^3/s (0.82 m^3/s) May 3, 1968.

Flood of Dec. 22, 1964, reached a stage of 18.6 ft (5.67 m), present site, from floodmark by local resident, discharge, 16,800 ft^3/s (476 m^3/s), from rating curve, at former site, extended above 9,000 ft^3/s (255 m^3/s) and field estimate of overflow.

REMARKS.--Records good. Slight regulation by fish hatchery 600 ft (183 m) above station. Several diversions in the vicinity of Butte Falls, the two largest being the city of Medford diversion and Eagle Point Irrigation District Canal. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	159	95	173	188	163	384	124	68	55	46	44
2	137	143	93	176	181	141	345	118	65	52	44	46
3	139	173	171	173	173	141	321	112	65	51	48	45
4	139	212	139	139	168	154	307	118	64	50	49	43
5	139	217	112	135	215	147	298	120	62	50	46	43
6	139	166	114	137	196	145	253	112	61	51	44	46
7	143	128	110	122	188	139	188	102	59	52	43	48
8	137	124	105	118	178	173	181	99	56	54	44	45
9	150	110	98	130	173	159	176	95	58	48	46	45
10	183	110	92	137	173	271	166	91	59	48	45	45
11	204	104	94	159	171	298	159	90	56	48	44	44
12	166	100	104	760	186	268	159	85	55	46	45	45
13	157	99	102	552	171	265	209	97	58	44	45	48
14	154	97	112	408	166	235	173	85	56	45	52	49
15	157	97	159	345	159	212	157	86	56	42	46	50
16	154	95	207	532	147	217	159	83	59	45	48	51
17	152	95	504	456	143	256	207	163	67	45	51	51
18	152	97	396	352	137	226	201	90	65	45	49	51
19	150	161	520	324	135	215	212	77	61	51	49	61
20	150	135	430	277	130	201	188	74	58	50	50	71
21	150	114	410	277	126	232	176	71	54	45	46	55
22	147	110	690	247	124	229	171	67	56	46	48	61
23	150	102	480	217	122	196	168	67	56	46	49	74
24	150	100	480	226	122	183	163	85	55	48	51	86
25	147	97	321	363	120	176	159	100	55	44	65	85
26	150	102	265	247	122	168	154	77	54	45	45	67
27	150	108	286	215	122	166	150	73	52	45	55	61
28	159	102	280	207	128	171	139	70	52	45	41	58
29	163	99	226	193	------	201	137	68	52	46	41	56
30	157	97	201	198	------	373	130	70	52	46	45	56
31	154	------	191	223	------	436	------	73	------	45	70	------
TOTAL	4,716	3,673	7,587	8,218	4,364	6,557	5,990	2,842	1,746	1,473	1,490	1,630
MEAN	152	122	245	265	156	212	200	91.7	58.2	47.5	48.1	54.3
MAX	204	217	690	760	215	436	384	163	68	55	70	86
MIN	137	95	92	118	120	139	130	67	52	42	41	43
AC-FT	9,350	7,290	15,050	16,300	8,660	13,010	11,880	5,640	3,460	2,920	2,960	3,230

CAL YR 1972 TOTAL 141,292 MEAN 386 MAX 7,190 MIN 59 AC-FT 280,300
WTR YR 1973 TOTAL 50,286 MEAN 138 MAX 760 MIN 41 AC-FT 99,740

PEAK DISCHARGE (BASE, 1,800 cfs).--No peak above base.

14337600 ROGUE RIVER NEAR MCLEOD, OREG.

LOCATION.--Lat 42°39'20", long 122°42'50", in SW¼ sec.33, T.33 S., R.1 E., Jackson County, on left bank at Obstinate J Ranch, 1.3 mi (2.1 km) downstream from Big Butte Creek, 1.6 mi (2.6 km) southwest of McLeod, and at mile 154.0 (247.8 km).

DRAINAGE AREA.--983 mi^2 (2,429 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.08 ft (453.872 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 2,116 ft^3/s (59.9 m^3/s), 1,533,000 acre-ft/yr (1.89 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,180 ft^3/s (175 m^3/s) Dec. 22, gage height, 5.08 ft (1.548 m); minimum, 758 ft^3/s (21.5 m^3/s) Aug. 3.

Period of record: Maximum discharge, 30,000 ft^3/s (850 m^3/s) Mar. 3, 1972, gage height, 12.24 ft (3.731 m); minimum, 604 ft^3/s (17.1 m^3/s) Sept. 5, 1968.

Maximum stage since at least 1928, 20.35 ft (6.203 m) Dec. 22, 1964, from floodmarks, discharge, 74,300 ft^3/s (2,104 m^3/s), from slope-area measurement of peak flow.

REMARKS.--Records poor October through December, good thereafter. Some fluctuation caused by powerplant 15.4 mi (24.8 km) above station. Diversions for irrigation above station; most of flow of Big Butte Creek is diverted near Butte Falls. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,380	1,400	1,450	1,840	1,800	2,080	2,060	2,180	1,630	1,120	1,060	956
2	1,370	1,500	1,410	1,830	1,790	1,940	1,970	2,170	1,570	1,130	1,040	956
3	1,370	1,500	1,600	1,800	1,760	1,890	1,930	2,210	1,520	1,130	1,000	947
4	1,380	1,600	1,460	1,630	1,740	1,880	1,930	2,290	1,490	1,130	983	938
5	1,370	1,700	1,300	1,600	1,910	1,810	1,990	2,170	1,450	1,130	983	938
6	1,370	1,500	1,330	1,620	1,940	1,810	2,020	2,140	1,430	1,140	983	938
7	1,370	1,450	1,300	1,450	1,890	1,760	1,950	2,090	1,410	1,140	983	956
8	1,370	1,440	1,280	1,460	1,840	1,810	1,910	2,110	1,390	1,140	992	965
9	1,370	1,460	1,200	1,620	1,830	1,780	1,930	2,100	1,390	1,130	983	956
10	1,400	1,460	1,240	1,650	1,870	2,370	1,960	2,060	1,370	1,130	983	920
11	1,800	1,420	1,280	1,710	1,850	2,500	2,040	2,020	1,340	1,130	983	911
12	1,600	1,380	1,300	3,420	1,870	2,270	2,110	2,060	1,320	1,130	983	929
13	1,500	1,350	1,300	4,120	1,800	2,200	2,390	2,220	1,320	1,160	983	938
14	1,480	1,340	1,280	3,680	1,790	2,070	2,250	2,390	1,270	1,090	974	929
15	1,440	1,340	1,280	3,140	1,790	2,000	2,170	2,510	1,250	1,120	974	929
16	1,430	1,320	1,400	3,840	1,730	2,000	2,190	2,490	1,260	1,120	974	929
17	1,400	1,320	1,900	3,570	1,730	2,050	2,700	2,580	1,410	1,090	974	920
18	1,400	1,300	2,600	3,090	1,700	1,950	2,460	2,490	1,400	1,100	983	929
19	1,400	1,400	3,200	2,810	1,670	1,950	2,360	2,330	1,310	1,090	974	983
20	1,400	1,440	3,060	2,520	1,640	1,900	2,220	2,150	1,260	1,130	965	1,070
21	1,390	1,400	3,290	2,430	1,620	1,940	2,170	1,980	1,220	1,110	956	1,020
22	1,390	1,400	5,480	2,270	1,620	1,910	2,180	1,880	1,210	1,100	956	1,020
23	1,380	1,400	4,150	2,150	1,600	1,790	2,220	1,830	1,210	1,100	956	1,220
24	1,380	1,380	3,960	2,120	1,600	1,800	2,220	2,130	1,190	1,090	965	1,350
25	1,360	1,380	3,080	2,360	1,670	1,800	2,230	2,320	1,180	1,080	1,060	1,480
26	1,360	1,500	2,640	2,020	1,690	1,800	2,360	1,940	1,180	1,060	1,000	1,120
27	1,360	1,750	2,530	1,960	1,780	1,780	2,540	1,800	1,150	1,070	1,000	1,050
28	1,370	1,600	2,410	1,940	1,780	1,760	2,530	1,730	1,140	1,060	992	1,020
29	1,400	1,540	2,160	1,890	------	1,750	2,380	1,690	1,150	1,060	992	1,000
30	1,380	1,500	2,030	1,900	------	2,050	2,250	1,660	1,130	1,070	974	1,000
31	1,370	------	1,940	1,930	------	2,190	------	1,680	------	1,040	992	------
TOTAL	43,740	43,470	65,840	71,370	49,300	60,590	65,620	65,400	39,550	34,320	30,600	30,217
MEAN	1,411	1,449	2,124	2,302	1,761	1,955	2,187	2,110	1,318	1,107	987	1,007
MAX	1,800	1,750	5,480	4,120	1,940	2,500	2,700	2,580	1,630	1,160	1,060	1,480
MIN	1,360	1,300	1,200	1,450	1,600	1,750	1,910	1,660	1,130	1,040	956	911
AC-FT	86,760	86,220	130,600	141,600	97,790	120,200	130,200	129,700	78,450	68,070	60,700	59,940

CAL YR 1972 TOTAL 1,132,070 MEAN 3,093 MAX 23,400 MIN 1,200 AC-FT 2,245,000
WTR YR 1973 TOTAL 600,017 MEAN 1,644 MAX 5,480 MIN 911 AC-FT 1,190,000

14337800 ELK CREEK NEAR CASCADE GORGE, OREG.

LOCATION.--Lat 42°46'25", long 122°40'15", in NW¼ sec.23, T.32 S., R.1 E., Jackson County, on right bank 0.1 mi (0.2 km) downstream from Sugarpine Creek, 6.5 mi (10.5 km) northwest of town of Cascade Gorge, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--78.8 mi^2 (204.1 km^2).

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (555 m), from topographic map.

EXTREMES.--Maximum discharge during period August to September 1973, 22 ft^3/s (0.62 m^3/s) Sept. 24, gage height, 2.66 ft (0.813 m); minimum daily, 0.72 ft^3/s (0.020 m^3/s) Aug. 24.

REMARKS.--Records fair. No regulation. Many diversions above station for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											2.1	1.3
2											1.9	1.1
3											1.9	1.0
4											1.8	.95
5											1.7	.90
6											1.8	.90
7											1.6	.90
8											1.2	.95
9											1.1	1.0
10											.99	1.0
11											.99	1.0
12											1.0	.90
13											.92	.90
14											1.1	.90
15											1.1	.95
16											1.1	.0
17											1.2	1.2
18											1.1	1.6
19											.92	2.5
20											.85	4.8
21											.92	5.2
22											.92	5.2
23											.85	12
24											.72	17
25											.99	20
26											1.1	11
27											.92	6.6
28											.85	6.5
29					------						.92	5.5
30					------						1.7	4.4
31		------			------		------		------		1.6	------
TOTAL											37.86	119.15
MEAN											1.22	3.97
MAX											2.1	20
MIN											.72	.90
AC-FT											75	236

PEAK DISCHARGE (BASE, 1,600 CFS).--No peak above base.

14338000 ELK CREEK NEAR TRAIL, OREG.

LOCATION.--Lat 42°39'50", long 122°44'50", in SW¼ sec.30, T.33 S., R.1 E., Jackson County, on right bank 3.3 mi (5.3 km) northeast of Trail and at mile 0.4 (0.6 km).

DRAINAGE AREA.--133 mi^2 (344 km^2).

PERIOD OF RECORD.--October 1945 to current year. Prior to March 1946 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,456.56 ft (443.959 m) above mean sea level. Prior to July 5, 1946, nonrecording gage at various sites within 1.0 mi (1.6 km) of present site at different datums. July 5, 1946, to June 22, 1950, nonrecording gage, and June 23, 1950, to May 23, 1954, water-stage recorder, at site 0.3 mi (0.5 km) upstream at datum 12.14 ft (3.700 m) higher.

AVERAGE DISCHARGE.--28 years, 232 ft^3/s (6.57 m^3/s), 168,100 acre-ft/yr (207 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,820 ft^3/s (51.5 m^3/s) Jan. 12, gage height, 6.78 ft (2.067 m); minimum, 0.83 ft^3/s (0.024 m^3/s) Aug. 13, 14, 22.

Period of record: Maximum discharge, 19,200 ft^3/s (544 m^3/s) Dec. 22, 1964, gage height, 18.84 ft (5.742 m), from rating curve extended above 4,700 ft^3/s (133 m^3/s) on basis of slope-area measurement of peak flow; minimum, 0.40 ft^3/s (0.011 m^3/s) Aug. 16, 1965.

REMARKS.--Records good. No regulation. Diversions above station for irrigation. Records of chemical analyses and water temperatures for the current water year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	38	140	217	120	324	109	25	8.7	1.4	1.8
2	13	26	34	130	197	123	284	100	24	8.1	1.3	1.7
3	13	27	58	120	188	123	260	96	21	7.5	1.4	1.6
4	13	58	61	103	188	127	257	100	23	7.2	1.4	2.0
5	13	68	47	90	268	125	276	92	19	6.3	1.4	1.6
6	13	41	45	83	316	130	257	81	18	6.1	1.4	1.3
7	12	33	37	73	280	123	217	78	18	6.1	1.3	1.4
8	13	31	33	68	240	130	182	74	17	5.2	1.3	1.7
9	15	31	32	68	217	120	159	70	16	4.2	1.1	1.9
10	20	34	31	67	211	260	148	67	17	3.9	1.2	1.8
11	32	33	30	140	194	376	140	62	16	3.9	1.1	1.6
12	33	28	29	1,070	170	296	140	55	14	3.5	1.1	1.4
13	24	25	29	1,090	148	253	268	51	14	3.3	.91	1.3
14	21	22	28	690	140	224	224	55	14	3.3	.95	1.4
15	19	22	28	465	148	201	182	54	14	2.8	1.0	1.4
16	19	21	60	882	137	197	164	50	15	2.8	1.1	1.4
17	19	20	500	816	127	204	197	45	21	3.1	1.1	1.4
18	17	20	720	585	120	201	234	39	26	3.1	1.0	1.6
19	17	39	750	474	111	240	312	39	19	3.0	1.1	2.5
20	16	68	615	368	103	268	352	39	15	3.5	1.1	4.9
21	16	56	610	316	92	253	336	37	15	3.0	.95	6.6
22	15	54	1,320	276	88	244	328	35	14	1.4	.95	7.2
23	15	46	785	237	83	214	304	38	14	1.8	1.2	15
24	15	36	665	217	79	194	253	45	14	2.2	1.3	24
25	15	33	447	304	83	185	217	47	14	2.0	1.9	29
26	14	50	312	284	85	176	191	37	13	1.3	1.8	17
27	14	100	260	240	105	161	173	33	12	1.3	2.0	11
28	16	67	264	214	100	153	156	31	11	1.4	2.2	9.3
29	21	54	227	207	------	137	137	29	11	1.4	2.0	8.1
30	21	45	185	214	------	201	125	27	9.3	1.4	2.1	7.5
31	19	------	164	250	------	372	------	28	------	1.4	1.9	------
TOTAL	536	1,208	8,444	10,281	4,435	6,131	6,797	1,743	493.3	114.2	41.96	170.4
MEAN	17.3	40.3	272	332	158	198	227	56.2	16.4	3.68	1.35	5.68
MAX	33	100	1,320	1,090	316	376	352	109	26	8.7	2.2	29
MIN	12	20	28	67	79	120	125	27	9.3	1.3	.91	1.3
AC-FT	1,060	2,400	16,750	20,390	8,800	12,160	13,480	3,460	978	227	83	338

CAL YR 1972 TOTAL 112,886.90 MEAN 308 MAX 7,130 MIN 3.2 AC-FT 223,900
WTR YR 1973 TOTAL 40,394.86 MEAN 111 MAX 1,320 MIN .91 AC-FT 80,120

PEAK DISCHARGE (BASE, 2,700 CFS).--No peak above base.

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OREG.

LOCATION.--Lat 42°31'30", long 122°50'30", in SE¼ sec.17, T.35 S., R.1 W., Jackson County, on right bank 50 ft (15 m) upstream from Dodge Bridge, 0.7 mi (1.1 km) downstream from Reese Creek, 4.3 mi (6.9 km) northwest of Eagle Point, and at mile 138.61 (223.02 km).

DRAINAGE AREA.--1,215 mi^2 (3,147 km^2).

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,272.39 ft (387.824 m) above mean sea level. Prior to Dec. 21, 1938, nonrecording gage, Dec. 21, 1938, to Aug. 15, 1968, water-stage recorder, at datum 1.27 ft (0.387 m) higher.

AVERAGE DISCHARGE.--35 years, 2,622 ft^3/s (74.3 m^3/s), 1,900,000 acre-ft/yr (2.34 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,060 ft^3/s (257 m^3/s) Dec. 22, gage height, 5.27 ft (1.606 m); minimum, 849 ft^3/s (24.0 m^3/s) Sept. 21.

Period of record: Maximum discharge, 87,600 ft^3/s (2,480 m^3/s) Dec. 22, 1964, gage height, 12.78 ft (3.895 m), datum then in use, from rating curve extended above 23,000 ft^3/s (651 m^3/s); minimum, 611 ft^3/s (17.3 m^3/s) Aug. 6, 14, 29, Sept. 9, 1940.

REMARKS.--Records excellent. Some diurnal fluctuation caused by powerplant 30 mi (48 km) upstream. Diversions for irrigation above station; most of flow of Big Butte Creek is diverted near Butte Falls. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1094: 1942(M), 1943, 1945(M), 1946. WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,590	1,610	1,550	2,130	2,230	2,280	2,640	2,400	1,770	1,240	1,040	944
2	1,580	1,730	1,520	2,090	2,160	2,210	2,490	2,370	1,690	1,230	1,030	944
3	1,580	1,700	1,790	2,060	2,120	2,130	2,390	2,390	1,640	1,220	1,030	932
4	1,580	1,980	1,680	1,910	2,100	2,150	2,370	2,470	1,600	1,200	1,030	920
5	1,560	2,130	1,470	1,820	2,400	2,090	2,420	2,400	1,570	1,190	1,020	920
6	1,550	1,800	1,550	1,860	2,510	2,070	2,450	2,320	1,540	1,190	1,020	920
7	1,550	1,680	1,520	1,680	2,370	2,030	2,360	2,280	1,520	1,190	1,020	932
8	1,550	1,680	1,350	1,640	2,280	2,090	2,240	2,280	1,500	1,190	1,000	944
9	1,580	1,610	1,280	1,800	2,230	2,030	2,230	2,280	1,480	1,180	992	932
10	1,830	1,590	1,360	1,830	2,240	2,570	2,230	2,240	1,460	1,170	992	920
11	2,040	1,590	1,370	2,000	2,230	3,090	2,310	2,200	1,440	1,150	992	908
12	1,850	1,530	1,370	5,270	2,210	2,710	2,370	2,210	1,430	1,150	992	920
13	1,710	1,500	1,370	6,140	2,120	2,610	2,980	2,320	1,420	1,140	980	932
14	1,670	1,500	1,350	4,900	2,070	2,470	2,710	2,510	1,390	1,130	992	920
15	1,650	1,490	1,330	3,900	2,100	2,340	2,540	2,620	1,390	1,130	980	920
16	1,620	1,400	1,590	5,690	2,010	2,310	2,490	2,640	1,390	1,140	968	920
17	1,610	1,440	2,920	5,120	2,000	2,440	3,000	2,680	1,530	1,110	968	908
18	1,590	1,460	3,700	4,160	1,970	2,320	2,850	2,620	1,580	1,110	980	908
19	1,580	1,670	4,560	3,700	1,940	2,390	2,870	2,450	1,460	1,110	968	992
20	1,580	1,700	4,240	3,210	1,890	2,420	2,780	2,290	1,400	1,140	968	1,100
21	1,560	1,580	4,040	3,020	1,860	2,400	2,680	2,130	1,350	1,110	956	1,080
22	1,560	1,590	7,780	2,780	1,850	2,420	2,660	2,030	1,360	1,100	956	1,050
23	1,550	1,520	5,650	2,590	1,830	2,210	2,660	1,980	1,330	1,100	956	1,200
24	1,550	1,500	5,180	2,510	1,820	2,180	2,610	2,200	1,320	1,090	968	1,370
25	1,530	1,470	3,880	3,090	1,880	2,160	2,570	2,510	1,320	1,080	1,030	1,520
26	1,530	1,670	3,210	2,640	1,910	2,150	2,620	2,110	1,310	1,060	992	1,200
27	1,530	2,090	2,960	2,440	2,010	2,100	2,810	1,950	1,280	1,060	980	1,090
28	1,560	1,770	2,920	2,360	1,980	2,090	2,780	1,880	1,270	1,060	968	1,060
29	1,610	1,650	2,590	2,280	------	2,040	2,640	1,820	1,260	1,060	956	1,040
30	1,560	1,580	2,390	2,280	------	2,390	2,490	1,800	1,240	1,050	956	1,040
31	1,560	------	2,280	2,440	------	2,890	------	1,820	------	1,030	980	------
TOTAL	49,950	49,210	81,750	91,340	58,320	71,780	77,240	70,200	43,240	35,110	30,660	30,396
MEAN	1,611	1,640	2,637	2,946	2,083	2,315	2,575	2,265	1,441	1,133	989	1,013
MAX	2,040	2,130	7,780	6,140	2,510	3,090	3,000	2,680	1,770	1,240	1,040	1,520
MIN	1,530	1,400	1,280	1,640	1,820	2,030	2,230	1,800	1,240	1,030	956	908
AC-FT	99,080	97,610	162,200	181,200	115,700	142,400	153,200	139,200	85,770	69,640	60,810	60,270

CAL YR 1972 TOTAL 1,339,270 MEAN 3,659 MAX 37,000 MIN 1,280 AC-FT 2,656,000
WTR YR 1973 TOTAL 689,186 MEAN 1,888 MAX 7,780 MIN 908 AC-FT 1,367,000

PEAK DISCHARGE (BASE, 9,000 CFS).--Dec. 22 (1500) 9,060 cfs (5.27 ft).

14341500 SOUTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK, OREG.

LOCATION.--Lat 42°24'30", long 122°36'00", in SE¼ sec.29, T.36 S., R.2 E., Jackson County, on left bank 0.5 mi (0.8 km) upstream from intake of Rogue River Valley Canal, 1.4 mi (2.3 km) southeast of Lakecreek, and at mile 18.1 (29.1 km).

DRAINAGE AREA.--138 mi² (357 km²).

PERIOD OF RECORD.--April 1921 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,725 ft (526 m), by barometer. Supplementary nonrecording gage at site 25 ft (8 m) upstream used Jan. 12 to Sept. 6, 1965. Apr. 15 to June 17, 1921, nonrecording gage, and June 18, 1921, to Sept. 6, 1965, water-stage recorder at site 75 ft (23 m) upstream at datum 5.0 ft (1.52 m) lower.

AVERAGE DISCHARGE.--52 years, 105 ft³/s (2.97 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 260 ft³/s (7.36 m³/s) Jan. 16, gage height, 6.25 ft (1.905 m); minimum, 12 ft³/s (0.34 m³/s) Oct. 8.

Period of record: Maximum discharge, 7,660 ft³/s (217 m³/s) Dec. 2, 1962, gage height, 8.35 ft (2.54 m), site and datum then in use; minimum, 2.0 ft³/s (0.057 m³/s) Aug. 10, 1931.

REMARKS.--Records good. No regulation. Diversions for irrigation above station; also, in December 1958 Dead Indian collection canal began diverting above station from Conde Creek and Dead Indian Creek and in December 1959 South Fork Little Butte collection canal began diverting above station from South Fork Little Butte Creek, Daley Creek, and Beaver Dam Creek. These are transbasin diversions to Howard Prairie Reservoir in Klamath River basin, but eventually this water is diverted back to Rogue River basin for irrigation of lands in the Ashland-Medford area and power development enroute.

REVISIONS (WATER YEARS).--WSP 934: 1925(M). WSP 1398: 1922, 1927(M), 1937, 1941-42.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	19	20	40	44	66	150	108	36	23	15	15
2	25	21	19	40	44	66	132	98	39	22	15	15
3	25	20	27	39	42	64	122	90	34	21	15	15
4	25	23	26	34	41	66	118	95	31	20	15	15
5	25	31	23	34	42	66	125	90	31	20	15	15
6	20	23	24	36	44	62	130	79	31	20	15	16
7	14	21	21	28	46	59	128	80	32	19	15	16
8	13	25	19	29	48	58	122	65	34	19	15	16
9	15	23	19	30	48	58	118	60	33	18	15	16
10	19	21	19	33	52	108	118	54	33	18	15	15
11	21	20	21	37	52	140	120	52	37	18	15	15
12	18	19	22	98	48	120	122	50	34	18	15	15
13	16	19	23	148	46	122	148	52	32	18	15	15
14	16	19	24	130	46	115	135	52	32	17	14	16
15	16	19	27	102	46	110	120	59	32	17	15	16
16	16	19	31	172	41	105	118	48	33	16	15	16
17	16	19	42	145	40	122	176	42	39	16	15	16
18	16	18	46	125	38	120	182	39	38	16	15	17
19	16	19	68	102	34	120	200	38	32	17	15	18
20	16	22	65	88	33	115	172	37	30	17	15	19
21	16	20	71	90	33	110	152	33	28	17	15	18
22	16	20	125	77	31	110	155	58	28	18	15	18
23	16	19	95	71	31	98	160	65	28	17	15	19
24	16	19	120	66	32	88	152	77	27	16	16	25
25	16	18	82	66	38	84	145	95	26	16	19	28
26	16	24	66	56	41	84	142	71	25	16	18	22
27	16	32	66	56	50	84	145	64	24	16	16	18
28	18	25	65	50	54	88	142	59	24	15	16	18
29	19	24	56	47	------	90	130	53	23	16	16	18
30	18	22	50	47	------	125	120	48	23	16	16	18
31	18	------	47	48	------	176	------	40	------	15	16	------
TOTAL	558	643	1.429	2.164	1.185	2,999	4.199	1.951	929	548	477	519
MEAN	18.0	21.4	46.1	69.8	42.3	96.7	140	62.9	31.0	17.7	15.4	17.3
MAX	25	32	125	172	54	176	200	108	39	23	19	28
MIN	13	18	19	28	31	58	118	33	23	15	14	15
AC-FT	1.110	1.280	2.830	4.290	2,350	5,950	8.330	3.870	1.840	1.090	946	1.030

CAL YR 1972 TOTAL 54.212 MEAN 148 MAX 2.450 MIN 13 AC-FT 107.500
WTR YR 1973 TOTAL 17.601 MEAN 48.2 MAX 200 MIN 13 AC-FT 34.910

PEAK DISCHARGE (BASE, 500 CFS).--No peak above base.

14342500 NORTH FORK LITTLE BUTTE CREEK AT FISH LAKE, NEAR LAKECREEK, OREG.

LOCATION.--Lat 42°22'35", long 122 21'20", in SE¼SW¼ sec.4, T.37 S., R.4 E., Jackson County, on right bank 0.5 mi (0.8 km) downstream from Fish Lake dam, 14 mi (23 km) east of Lakecreek, and at mile 15.2 (24.5 km).

DRAINAGE AREA.--20.8 mi^2 (53.9 km^2).

PERIOD OF RECORD.--October 1914 to July 1915, June 1916 to current year. Monthly discharge only November 1916 to May 1917, published in WSP 1318.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,571.41 ft (1,393.366 m) above mean sea level. Oct. 1, 1914. to July 31, 1915, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. June 1, 1916, to July 9, 1918, nonrecording gage and July 10, 1918, to Oct. 28, 1932, water-stage recorder at site 0.25 mi (0.40 km) upstream at different datums.

AVERAGE DISCHARGE.--57 years (1916-73), 36.5 ft^3/s (1.03 m^3/s), 26,440 acre-ft/yr (32.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 106 ft^3/s (3.00 m^3/s) Aug. 3,4; maximum gage height, 1.76 ft (0.536 m) Aug. 3; minimum discharge, 7.6 ft^3/s (0.22 m^3/s) Sept. 27.

Period of record: Maximum discharge, about 940 ft^3/s (26.6 m^3/s) June 5, 1917, computed from rate of change in contents of reservoir after break in dam occurred; no flow at times.

REMARKS.--Records good. Since 1915, Fish Lake (see below) has stored water for irrigation by Medford Irrigation District. Cascade Canal diverts from Fourmile Lake in Klamath River basin and discharges into lava bed 1.0 mi (1.6 km) above Fish Lake; diversion began August 1923. No diversion from creek above station.

REVISIONS (WATER YEARS).--WSP 654: Drainage area (former site). WSP 1218: 1917(M). WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	42	43	39	33	28	29	35	65	85	95	60
2	33	43	42	39	33	28	29	35	65	85	96	58
3	33	43	45	39	30	28	29	35	65	85	102	58
4	33	43	45	39	30	28	29	36	63	85	106	58
5	33	51	43	39	30	28	29	36	63	83	105	56
6	34	50	43	39	30	28	29	36	63	83	103	56
7	34	48	43	36	30	28	29	36	63	83	102	54
8	34	48	43	36	29	28	29	36	61	83	100	53
9	34	48	43	36	29	28	29	36	65	83	99	53
10	34	46	43	36	28	28	29	35	69	83	90	53
11	34	45	43	36	28	28	29	35	69	81	87	51
12	34	45	42	36	28	28	29	35	74	81	87	51
13	34	45	42	36	28	28	29	35	74	81	85	51
14	34	43	42	36	28	28	29	35	74	79	85	48
15	34	45	42	36	28	28	29	36	74	83	83	45
16	34	45	42	36	28	29	30	36	72	87	81	45
17	34	43	42	36	28	29	32	40	72	87	81	45
18	34	43	40	36	28	29	32	54	72	92	79	45
19	34	43	42	36	28	29	32	72	70	96	78	40
20	34	45	40	36	28	29	32	70	76	95	78	30
21	34	45	40	36	28	29	32	69	81	95	78	16
22	34	45	43	36	28	29	33	72	85	93	78	13
23	34	43	42	36	28	29	33	60	87	93	76	13
24	34	43	43	36	28	29	33	48	88	93	76	14
25	34	43	42	36	28	29	33	36	88	92	70	11
26	35	46	40	36	28	29	33	36	88	92	65	8.0
27	35	48	40	36	28	29	35	36	87	90	65	8.0
28	35	46	40	34	28	29	35	36	87	90	65	8.0
29	36	45	40	33	------	29	35	39	87	93	63	8.0
30	38	45	39	33	------	29	35	61	85	95	63	8.0
31	38	------	39	33	------	29	------	65	------	95	63	------
TOTAL	1.062	1.353	1.298	1.123	806	884	930	1.362	2.232	2.721	2.584	1.117.0
MEAN	34.3	45.1	41.9	36.2	28.8	28.5	31.0	43.9	74.4	87.8	83.4	37.2
MAX	38	51	45	39	33	29	35	72	88	96	106	60
MIN	33	42	39	33	28	28	29	35	61	79	63	8.0
AC-FT	2.110	2.680	2.570	2.230	1.600	1.750	1.840	2.700	4.430	5.400	5.130	2.220
(†)	8,060	8,060	8,060	8,020	a7,650	a7,650	a7,550	7,160	6,000	4,380	2,630	a2,160

CAL YR 1972 TOTAL 24.992.0 MEAN 68.3 MAX 135 MIN 32 AC-FT 49.570
WTR YR 1973 TOTAL 17.472.0 MEAN 47.9 MAX 106 MIN 8.0 AC-FT 34.660

† Monthend contents, in acre-feet, of Fish Lake.
a Interpolated.

14343000 NORTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK, OREG.

LOCATION.--Lat 42°24'10", long 122°32'10", in NW¼ sec.36, T.36 S., R.2 E., Jackson County, on right bank 1.2mi (1.9 km) upstream from Wasson Canyon, 4.9 mi (7.9 km) east of Lakecreeek, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--43.8 mi^2 (113.4 km^2).

PERIOD OF RECORD.--September 1911 to March 1913, July to September 1917, May 1922 to December 1964, September 1965 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "above Medford intake, near Lakecreek" 1922-28, 1931-40. Records for April to September 1916, May 1917 to September 1919, April to September 1921, and October 1923 to September 1924 at site 3 mi (5 km) upstream not equivalent owing to diversions and difference in drainage areas.

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1968. Altitude of gage is 2,160 ft (658 m), from topographic map. Sept. 10, 1911, to Mar. 31, 1913, and July 1 to Sept. 30, 1917, nonrecording gage at site 1,000 ft (305 m) downstream at different datums. May 26, 1922, to Dec. 31, 1964, water-stage recorder at site 1,000 ft (305 m) downstream at datum 2,125.01 ft (564.703 m) above mean sea level.

AVERAGE DISCHARGE.--51 years (1911-12, 1922-64, 1965-73), 72.2 ft^3/s (2.04 m^3/s), 52,310 acre-ft/yr (64.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 134 ft^3/s (3.79 m^3/s) Aug. 5, gage height, 3.32 ft (1.012 m); maximum gage height, 3.66 ft (1.116 m) Dec. 10, ice jam; minimum discharge, 26 ft^3/s (0.74 m^3/s) Sept. 26-30.

Period of record: Maximum discharge, 1,750 ft^3/s (49.6 m^3/s) Dec. 22, 1964, gage height, 3.70 ft (1.128 m), site and datum then in use; minimum, 11 ft^3/s (0.31 m^3/s) Oct. 29 to Nov. 8, 1931.

REMARKS.--Records excellent. Flow partly regulated since 1915 by Fish Lake (published with station 14342500). Diversions for irrigation above station; some water diverted into Fish Lake from Fourmile Lake, in Klamath River basin, since 1923.

REVISIONS (WATER YEARS).--WSP 1518: 1912-13. WSP 1738: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	63	63	63	60	60	91	68	86	102	113	74
2	55	64	61	63	59	58	83	67	86	102	119	71
3	55	64	67	63	59	58	78	67	84	102	122	71
4	55	71	65	60	59	60	74	70	83	102	124	71
5	55	74	64	59	60	60	72	70	83	102	124	71
6	55	70	64	59	60	59	71	68	83	102	122	70
7	55	67	64	58	59	58	68	67	81	102	120	70
8	56	68	56	58	60	58	68	65	81	101	120	68
9	59	67	58	58	60	59	67	64	83	99	120	68
10	59	65	58	58	60	83	65	63	84	99	115	67
11	60	64	58	60	60	74	64	63	84	99	108	67
12	58	64	58	78	60	70	64	63	92	99	106	65
13	56	64	58	74	59	71	67	63	92	97	106	65
14	56	63	58	70	59	70	64	61	92	97	104	65
15	56	61	61	67	59	68	64	64	92	99	102	63
16	58	63	68	71	58	68	65	61	92	106	97	61
17	58	61	70	68	58	72	77	61	92	106	96	59
18	58	61	68	68	58	71	74	75	91	108	96	60
19	58	64	77	67	58	70	84	97	89	117	94	59
20	58	64	74	64	58	68	81	94	94	115	94	50
21	58	64	71	64	58	68	77	94	99	115	94	38
22	58	63	75	63	58	68	75	89	101	113	92	31
23	58	61	72	61	58	64	74	84	104	113	92	33
24	56	61	86	60	58	63	72	81	106	111	92	35
25	56	60	71	61	58	61	72	61	106	111	91	31
26	56	71	68	60	58	60	71	60	106	111	81	26
27	56	71	72	59	58	60	71	59	106	111	80	26
28	59	68	72	59	58	64	71	58	104	111	80	26
29	59	65	68	59	------	63	70	58	104	111	78	26
30	59	64	64	60	------	88	68	81	102	117	78	26
31	60	------	64	61	------	92	------	86	------	117	78	------
TOTAL	1,770	1,950	2,053	1,953	1,647	2,066	2,162	2,182	2,782	3,297	3,138	1,613
MEAN	57.1	65.0	66.2	63.0	58.8	66.6	72.1	70.4	92.7	106	101	53.8
MAX	60	74	86	78	60	92	91	97	106	117	124	74
MIN	55	60	56	58	58	58	64	58	81	97	78	26
AC-FT	3,510	3,870	4,070	3,870	3,270	4,100	4,290	4,330	5,520	6,540	6,220	3,200

CAL YR 1972 TOTAL 42,605 MEAN 116 MAX 728 MIN 55 AC-FT 84,510
WTR YR 1973 TOTAL 26,613 MEAN 72.9 MAX 124 MIN 26 AC-FT 52,790

14350000 EMIGRANT CREEK NEAR ASHLAND, OREG.

LOCATION.--Lat 43°09'50", long 122°36'15", in SE¼NE¼ sec.20, T.39 S., R.2 E., Jackson County, on left bank 0.1 mi (0.2 km) downstream from Emigrant Dam, 6 mi (10 km) southeast of Ashland, and at mile 29.2 (47.0 km).

DRAINAGE AREA.--64.3 mi² (166.5 km²).

PERIOD OF RECORD.--January to June 1920, October 1920 to July 1922, February 1923 to May 1924 (incomplete), October 1924 to November 1925, February to August 1926, October 1926 to September 1928, April 1929 to September 1930, April 1931 to October 1932 (incomplete), April 1933 to September 1935, April 1936 to September 1939 (incomplete), April 1940 to September 1947, January 1948 to October 1952 (incomplete), December 1952 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 2,042.80 ft (622.645 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1926, water-stage recorder or nonrecording gage at several nearby sites at various datums. Oct. 1, 1926, to Feb. 24, 1959, water-stage recorder near present site at datum 10.93 ft (3.331 m) higher. Feb. 25, 1959, to May 7, 1961, water-stage recorder at site 1.0 mi (1.6 km) downstream at different datum.

AVERAGE DISCHARGE.--33 years (1924-25, 1926-28, 1929-30, 1933-35, 1940-47, 1953-73), 30.9 ft³/s (0.88 m³/s), 22,390 acre-ft/yr (27.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 52 ft³/s (1.47 m³/s) July 18-20, gage height, 1.16 ft (0.354 m); no flow at times.
Period of record: Maximum discharge, 5,260 (149 m³/s) Feb. 20, 1927, by computation of peak flow over dam; no flow at times.

REMARKS.--Records good except those for October to May, which are poor. Flow regulated since 1924 by Emigrant Lake (see below). Several diversions above station for irrigation; the principal diversion canals are Ashland lateral and East lateral (see below). From June 1923 to August 1960, water diverted by Keene Creek Canal from Klamath River basin into Emigrant Creek above station. Beginning May 1960, water from Klamath River basin diverted to Emigrant Creek above station via Green Springs powerplant diversion.

REVISIONS (WATER YEARS).--WSP 1448: 1921, 1927-28, 1937, 1953(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20		0	.10	.10	.10	.10	.10	31	35	48	32
2	.20		0	.10	.10	.10	.10	.10	21	41	48	31
3	.20		.10	.10	.10	.10	.20	.10	14	44	48	30
4	.20		0	.10	.10	.10	.20	.10	14	44	48	29
5	.20		0	.10	.10	.10	.20	.10	14	44	48	35
6	.30		0	.10	.10	.10	.10	.10	14	44	48	35
7	.20		0	.10	.10	.10	.10	.10	14	44	48	35
8	.20		0	.10	.10	.10	.10	.10	14	43	48	35
9	.30		0	.10	.10	.20	.10	.10	14	43	48	34
10	.30		0	.10	.10	.10	.10	.10	8.2	43	48	33
11	.30		0	.10	.10	.10	.10	3.6	11	43	48	30
12	0		0	.10	.10	.10	1.3	9.3	21	47	48	32
13	0		0	.10	.10	.10	3.5	9.3	17	48	48	33
14	0		0	.10	.10	.10	.20	9.3	17	48	48	33
15	0		0	.10	.10	.10	.20	9.3	17	48	48	33
16	0		0	.10	.10	.10	.20	9.3	17	48	48	33
17	0		0	.10	0	.10	.10	9.3	17	48	48	.20
18	0		0	.10	0	0	.10	18	16	49	47	.20
19	0		0	.10	0	0	.10	24	11	52	44	.10
20	0		.10	.10	0	.10	.10	24	11	51	43	.10
21	0		.10	.10	.10	.10	.10	24	14	48	43	.10
22	0		.10	.20	.10	.10	.10	24	17	48	43	.10
23	0		0	.10	.10	.20	.10	23	18	48	43	.10
24	0		0	.10	.10	.20	.10	17	17	48	42	.10
25	0		0	.10	.10	.20	.10	6.2	17	48	42	.10
26	0		0	.10	.10	.20	.10	.10	17	48	40	.10
27	0		0	.10	.10	.10	.10	.10	24	48	36	.10
28	0		0	.10	.10	.10	.10	.10	30	48	35	.10
29	0		0	.10	------	.20	.10	.10	31	48	33	.10
30	0		.10	.10	------	.10	.10	14	34	48	32	.10
31	0	------	.10	.10	------	.10	------	31	------	48	32	------
TOTAL	2.60	0	.60	3.20	2.40	3.50	8.20	266.00	532.2	1,435	1,371	524.60
MEAN	.084	0	.019	.10	.086	.11	.27	8.58	17.7	46.3	44.2	17.5
MAX	.30	0	.10	.20	.10	.20	3.5	31	34	52	48	35
MIN	0	0	0	.10	0	0	.10	.10	8.2	35	32	.10
AC-FT	5.2	0	1.2	6.3	4.8	6.9	16	528	1,060	2,850	2,720	1,040
(†)	a9,270	12,760	a16,800	22,100	26,100	31,460	36,250	32,590	26,100	a16,390	a7,380	a2,240
(‡)	0	0	0	0	0	5.4	1,850	6,680	7,630	8,640	8,470	4,500

CAL YR 1972 TOTAL 19,394.10 MEAN 53.0 MAX 536 MIN 0 AC-FT 38,470
WTR YR 1973 TOTAL 4,149.30 MEAN 11.4 MAX 52 MIN 0 AC-FT 8,230

† Monthend contents, in acre-feet, of Emigrant Lake.
‡ Diversion, in acre-feet, by East Lateral.
a Interpolated.

14357500 BEAR CREEK AT MEDFORD, OREG.

LOCATION.--Lat 42°19'40", long 122°52'10", in NW¼ sec.30, T.37 S., R.1 W., Jackson County, on left bank 40 ft (12 m) upstream from Main Street Bridge in Medford and at mile 9.91 (15.95 km).

DRAINAGE AREA.--289 mi² (749 km²).

PERIOD OF RECORD.--March 1915 to June 1920 (no low-flow records), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,343.98 ft (409.645 m) above mean sea level. See WSP 1738 for history of changes prior to Dec. 31, 1947.

AVERAGE DISCHARGE.--53 years (1920-73), 113 ft³/s (3.20 m³/s), 81,870 acre-ft/yr (101 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 316 ft³/s (8.95 m³/s) Jan. 16, gage height, 1.39 ft (0.424 m); minimum, 17 ft³/s (0.48 m³/s) July 18, 19.

Period of record: Maximum discharge, 14,500 ft³/s (411 m³/s) Dec. 2, 1962, gage height, 8.04 ft (2.451 m); maximum gage height, about 11.0 ft (3.35 m) Feb. 20, 1927, from floodmarks, present datum, site then in use; no flow at times.

REMARKS.--Records poor. Flow partly regulated since 1924 by Emigrant Lake (published with station 14350000). Numerous diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1044: 1944. WSP 1448: 1916, 1917(M), 1918-20, 1922, 1924, 1927(M), 1928, 1930. WSP 1568: Drainage area.

DISCHARGF. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	40	32	50	73	55	93	75	45	38	26	48
2	67	42	37	54	73	48	89	73	48	38	31	52
3	65	45	71	55	73	47	89	75	42	26	38	54
4	57	55	65	48	71	50	95	97	40	30	42	65
5	42	50	48	37	73	45	87	95	40	34	42	77
6	42	42	37	40	83	45	85	79	38	32	42	43
7	42	40	34	36	75	42	71	73	42	37	40	37
8	37	40	22	36	81	40	65	65	43	38	43	47
9	54	38	20	37	55	42	54	63	42	36	37	47
10	73	38	19	37	55	55	38	57	43	37	42	48
11	75	37	20	40	52	61	48	63	50	30	50	40
12	61	37	21	93	50	54	63	57	40	30	47	38
13	52	37	22	104	45	50	140	59	36	30	48	40
14	48	37	24	85	43	50	91	61	32	24	40	47
15	43	36	32	67	48	55	75	57	36	22	30	54
16	42	36	67	175	43	65	73	50	40	22	32	48
17	43	36	59	113	40	91	85	34	47	24	40	59
18	42	36	73	89	42	79	87	32	55	21	43	36
19	42	40	122	81	42	93	93	61	37	25	47	36
20	40	38	93	69	40	79	102	59	28	34	48	54
21	40	37	89	69	40	83	87	57	25	32	47	50
22	40	37	148	61	38	81	95	38	30	34	30	43
23	40	37	91	59	38	63	93	45	32	37	36	36
24	38	34	89	65	38	55	91	71	36	34	48	43
25	37	34	71	91	40	52	73	106	31	37	67	47
26	37	36	65	83	45	52	75	61	28	36	57	40
27	42	37	63	83	48	50	81	54	22	31	54	34
28	42	36	63	77	52	55	87	52	26	31	54	30
29	42	34	57	77	------	52	81	45	28	30	56	30
30	38	34	54	79	------	81	77	31	32	25	56	26
31	38	------	52	81	------	111	------	36	------	21	57	------
TOTAL	1.474	1.156	1.760	2.171	1.496	1.881	2.463	1.881	1.114	956	1.370	1.349
MEAN	47.5	38.5	56.8	70.0	53.4	60.7	82.1	60.7	37.1	30.8	44.2	45.0
MAX	75	55	148	175	83	111	140	106	55	38	67	77
MIN	37	34	19	36	38	40	38	31	22	21	26	26
AC-FT	2.920	2.290	3.490	4.310	2.970	3.730	4.890	3.730	2.210	1.900	2.720	2.680

CAL YR 1972	TOTAL 69.979	MEAN 191	MAX 3.310	MIN 19	AC-FT 138.800
WTR YR 1973	TOTAL 19.071	MEAN 52.2	MAX 175	MIN 19	AC-FT 37.830

14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OREG.

LOCATION.--Lat 42°26'15", long 122°59'10", in SW¼ sec.18, T.36 S., R.2 W., Jackson County, on right bank at Raygold, 0.1 mi (0.2 km) downstream from Gold Ray Dam, 1.0 mi (1.6 km) downstream from Bear Creek, 5.6 mi (9.0 km) northwest of Central Point, and at mile 125.8 (202.4 km).

DRAINAGE AREA.--2,053 mi² (5,317 km²).

PERIOD OF RECORD.--August 1905 to current year. Prior to October 1921, published as "near Tolo."

GAGE.--Water-stage recorder. Datum of gage is 1,121.78 ft (341.919 m) above mean sea level. Prior to Sept. 19, 1914, nonrecording gage and Sept. 19 1914, to Sept. 30, 1956, water-stage recorder, at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--68 years. 2.955 ft³/s (83.7 m³/s), 2,141,000 acre-ft/yr (2.64 km³/yr).

EXTREMES.--Current year: Maximum discharge, 10,600 ft³/s (300 m³/s) Dec. 22, gage height, 5.83 ft (1.777 m); minimum, 949 ft³/s (26.9 m³/s) Aug. 4; minimum daily, 1,010 ft³/s (28.6 m³/s) Aug. 15, 16.

Period of record: Maximum discharge, 131,000 ft³/s (3,710 m³/s) Dec. 23, 1964, gage height, 23.43 ft (7.141 m), from rating curve extended above 63,000 ft³/s (1,780 m³/s) on basis of slope-area measurement of 113,000 ft³/s (3,200 m³/s); minimum not determined; minimum daily, 616 ft³/s (17.4 m³/s) Sept. 6, 1931.

Flood in December 1861 reached a stage of about 32 ft (10 m), discharge not determined, and flood in February 1890 reached a stage of about 27.5 ft (8.38 m), discharge not determined, from information by Corps of Engineers.

REMARKS.--Records excellent. Prior to Apr. 23, 1972, diurnal fluctuation caused by powerplant 0.1 mi (0.2 km) above station. Slight regulation by Fish Lake (published with station 14342500) and Emigrant Lake (published with station 14350000). Many diversions for irrigation above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1248: 1906, 1914(M), 1915. WSP 1398: 1910(M), 1927(M). WSP 1738: Drainage area.

DISCHARGE. IN CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.770	1.670	1.740	2.460	2.620	2.500	3.320	2.630	1.830	1.240	1.020	1.070
2	1.720	1.800	1.710	2.370	2.510	2.510	3.040	2.560	1.750	1.230	1.010	1.090
3	1.700	1.810	2.180	2.360	2.460	2.370	2.830	2.560	1.700	1.200	1.030	1.090
4	1.720	2.060	2.100	2.220	2.410	2.440	2.740	2.680	1.670	1.190	1.030	1.080
5	1.710	2.320	1.810	2.040	2.740	2.360	2.780	2.690	1.630	1.190	1.040	1.090
6	1.690	1.920	1.770	2.100	2.900	2.320	2.820	2.530	1.570	1.190	1.030	1.050
7	1.670	1.800	1.720	1.940	2.770	2.270	2.730	2.460	1.530	1.190	1.020	1.050
8	1.670	1.820	1.600	1.850	2.650	2.310	2.610	2.410	1.510	1.200	1.030	1.070
9	1.720	1.800	1.530	2.030	2.530	2.240	2.550	2.380	1.480	1.180	1.030	1.080
10	2.020	1.770	1.600	2.060	2.540	2.710	2.510	2.330	1.480	1.160	1.030	1.080
11	2.230	1.750	1.630	2.210	2.530	3.650	2.530	2.260	1.460	1.140	1.050	1.030
12	2.090	1.700	1.630	6.280	2.510	3.110	2.590	2.250	1.420	1.140	1.050	1.030
13	1.880	1.670	1.630	7.500	2.410	2.970	3.620	2.340	1.410	1.130	1.050	1.030
14	1.810	1.670	1.630	6.020	2.340	2.830	3.290	2.560	1.410	1.100	1.030	1.030
15	1.780	1.650	1.670	4.720	2.360	2.660	2.980	2.670	1.390	1.130	1.010	1.050
16	1.750	1.640	1.980	6.830	2.270	2.600	2.850	2.690	1.410	1.100	1.010	1.060
17	1.720	1.630	3.530	6.570	2.230	2.900	3.490	2.700	1.530	1.080	1.030	1.080
18	1.700	1.630	4.470	5.210	2.210	2.720	3.520	2.670	1.650	1.080	1.050	1.060
19	1.700	1.850	5.820	4.640	2.150	2.720	3.550	2.510	1.500	1.080	1.040	1.140
20	1.690	1.940	5.500	3.880	2.100	2.810	3.450	2.380	1.410	1.120	1.040	1.230
21	1.680	1.790	4.830	3.650	2.070	2.800	3.230	2.220	1.340	1.110	1.030	1.240
22	1.660	1.780	8.880	3.350	2.040	2.970	3.170	2.070	1.330	1.110	1.030	1.160
23	1.650	1.720	7.100	3.020	2.020	2.590	3.170	1.980	1.330	1.110	1.030	1.280
24	1.640	1.690	6.470	2.940	2.010	2.460	3.070	2.190	1.330	1.090	1.060	1.470
25	1.610	1.660	4.910	3.860	2.040	2.420	2.970	2.740	1.330	1.060	1.160	1.630
26	1.600	1.770	3.880	3.310	2.100	2.390	2.990	2.270	1.310	1.060	1.160	1.370
27	1.600	2.310	3.490	2.920	2.220	2.330	3.140	2.040	1.270	1.040	1.120	1.220
28	1.640	2.000	3.600	2.800	2.210	2.360	3.150	1.950	1.250	1.050	1.090	1.180
29	1.700	1.870	3.100	2.660	------	2.280	2.960	1.860	1.240	1.040	1.070	1.150
30	1.650	1.790	2.780	2.630	------	2.610	2.780	1.800	1.240	1.050	1.070	1.140
31	1.640	------	2.630	2.920	------	3.830	------	1.840	------	1.030	1.090	------
TOTAL	53.810	54.280	98.920	109.350	65.950	82.040	90.430	73.220	43.710	34.820	32.540	34.330
MEAN	1.736	1.809	3.191	3.527	2.355	2.646	3.014	2.362	1.457	1.123	1.050	1.144
MAX	2.230	2.320	8.880	7.500	2.900	3.830	3.620	2.740	1.830	1.240	1.160	1.630
MIN	1.600	1.630	1.530	1.850	2.010	2.240	2.510	1.800	1.240	1.030	1.010	1.030
AC-FT	106.700	107.700	196.200	216.900	130.800	162.700	179.400	145.200	86.700	69.070	64.540	68.090

CAL YR 1972 TOTAL 1.622.150 MEAN 4.432 MAX 53.900 MIN 1.530 AC-FT 3.218.000
WTR YR 1973 TOTAL 773.400 MEAN 2.119 MAX 8.880 MIN 1.010 AC-FT 1.534.000

PEAK DISCHARGE (BASE, 11,000 CFS).--No peak above base.

14361500 ROGUE RIVER AT GRANTS PASS, OREG.

LOCATION.--Lat 42°25'50", long 123°19'00", in NW¼ sec.20, T.36 S., R.5 W., Josephine County, on right bank at city of Grants Pass filter plant, 0.6 mi (1.0 km) upstream from bridge on State Highway 99 at Grants Pass, and at mile 101.8 (163.8 km).

DRAINAGE AREA.--2,459 mi² (6,369 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 885.28 ft (269.833 m) above mean sea level. Prior to Aug. 8, 1957, at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--35 years, 3,487 ft³/s (98.8 m³/s), 2,526,000 acre-ft/yr (3.11 km³/yr).

EXTREMES.--Current year: Maximum discharge, 13,400 ft³/s (379 m³/s) Dec. 22, gage height, 7.51 ft (2.289 m); minimum, 809 ft³/s (22.9 m³/s) Aug. 17; minimum daily, 836 ft³/s (23.7 m³/s) Aug. 8, 16.

Period of record: Maximum discharge, 152,000 ft³/s (4,300 m³/s) Dec. 23, 1964, gage height, 34.15 ft (10.409 m), from rating curve extended above 93,000 ft³/s (2,630 m³/s); minimum, 195 ft³/s (5.52 m³/s) Jan. 30, 1961; minimum daily, 606 ft³/s (17.2 m³/s) Sept. 10, 1968.

Flood in December 1861 reached a stage of about 42 ft (13 m), present datum (information furnished by Corps of Engineers). Flood in February 1890 reached a stage of about 35 ft (11 m), present datum, and that of Feb. 21, 1927, about 31 ft (9 m), present datum, according to local resident.

REMARKS.--Records good. Large diurnal fluctuation at times caused by Savage Rapids Dam and by powerplant at Raygold; slight regulation by Fish Lake and Emigrant Lake. Many diversions from Rogue River and tributaries above station, the largest of which is at Savage Rapids Dam of Grants Pass Irrigation District, 5 mi (8 km) above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,670	1,790	1,860	2,770	3,160	2,650	3,800	2,610	1,730	1,120	854	944
2	1,600	1,930	1,840	2,650	3,000	2,820	3,540	2,500	1,660	1,110	854	944
3	1,580	1,990	2,280	2,640	2,910	2,640	3,270	2,500	1,590	1,070	845	944
4	1,600	2,240	2,490	2,490	2,830	2,710	3,140	2,590	1,490	1,050	845	944
5	1,610	2,580	2,050	2,250	3,190	2,640	3,140	2,710	1,500	1,050	854	935
6	1,590	2,170	1,910	2,290	3,500	2,560	3,160	2,490	1,460	1,040	845	926
7	1,580	1,970	1,920	2,150	3,280	2,520	3,060	2,420	1,420	1,060	845	917
8	1,560	1,940	1,720	1,970	3,120	2,520	2,920	2,360	1,310	1,070	836	926
9	2,120	1,970	1,650	2,140	3,000	2,470	2,920	2,320	1,340	1,060	854	935
10	2,280	1,920	1,650	2,210	3,000	2,680	2,790	2,220	1,350	1,030	854	935
11	2,360	1,910	1,650	2,380	3,000	3,930	2,620	2,180	1,330	998	854	926
12	2,360	1,850	1,650	6,910	2,940	3,400	2,250	2,120	1,300	1,070	872	899
13	1,980	1,820	1,650	10,000	2,850	3,220	3,730	2,190	1,290	989	872	890
14	1,920	1,810	1,750	7,560	2,700	3,120	3,590	2,400	1,290	980	863	890
15	1,860	1,780	1,780	5,710	2,730	2,950	3,220	2,520	1,290	962	854	890
16	1,840	1,760	2,050	8,170	2,610	2,880	3,030	2,580	1,300	944	836	908
17	1,800	1,750	3,490	8,610	2,530	3,140	3,350	2,580	1,380	917	845	926
18	1,790	1,740	5,290	6,430	2,500	3,040	3,640	2,590	1,550	908	854	953
19	1,790	1,980	6,930	5,650	2,430	3,240	3,590	2,430	1,420	917	863	989
20	1,780	2,220	6,740	4,730	2,360	3,660	3,560	2,310	1,320	926	854	1,170
21	1,760	1,980	5,590	4,340	2,310	3,390	3,330	2,120	1,240	953	854	1,250
22	1,750	1,940	10,600	3,950	2,260	3,560	3,220	1,960	1,220	944	854	1,180
23	1,740	1,880	9,090	3,560	2,240	3,140	3,170	1,860	1,230	944	872	1,250
24	1,740	1,840	7,700	3,400	2,210	2,910	3,090	1,970	1,240	935	890	1,560
25	1,720	1,810	5,810	4,530	2,250	2,860	2,980	2,700	1,230	908	926	1,720
26	1,720	1,850	4,480	4,170	2,310	2,790	2,950	2,320	1,200	890	1,020	2,120
27	1,710	2,330	3,890	3,520	2,450	2,710	3,040	1,980	1,170	872	998	1,400
28	1,750	2,210	4,080	3,320	2,450	2,730	3,120	1,870	1,120	872	971	1,260
29	1,850	2,030	3,520	3,160	------	2,620	2,980	1,790	1,120	872	935	1,210
30	1,790	1,930	3,160	3,120	------	2,770	2,790	1,710	1,120	863	917	1,200
31	1,780	------	2,970	3,490	------	4,340	------	1,760	------	872	926	------
TOTAL	55,980	58,920	113,240	130,270	76,120	92,610	94,990	70,660	40,210	30,196	27,216	32,941
MEAN	1,806	1,964	3,653	4,202	2,719	2,987	3,166	2,279	1,340	974	878	1,098
MAX	2,360	2,580	10,600	10,000	3,500	4,340	3,800	2,710	1,730	1,120	1,020	2,120
MIN	1,560	1,740	1,650	1,970	2,210	2,470	2,250	1,710	1,120	863	836	890
CFSM	.73	.80	1.49	1.71	1.11	1.21	1.29	.93	.54	.40	.36	.45
IN.	.85	.89	1.71	1.97	1.15	1.40	1.44	1.07	.61	.46	.41	.50
AC-FT	111,000	116,900	224,600	258,400	151,000	183,700	188,400	140,200	79,760	59,890	53,980	65,340

CAL YR 1972 TOTAL 1,829,120 MEAN 4,998 MAX 65,100 MIN 1,370 CFSM 2.03 IN 27.67 AC-FT 3,628,000
WTR YR 1973 TOTAL 823,353 MEAN 2,256 MAX 10,600 MIN 836 CFSM .92 IN 12.46 AC-FT 1,633,000

PEAK DISCHARGE (BASE, 13,000 CFS).--Dec. 22 (1830) 13,400 cfs (7.51 ft).

14362000 APPLEGATE RIVER NEAR COPPER, OREG.

LOCATION.--Lat 42°03'30", long 123°06'50", in SE¼ sec.25, T.40 S., R.4 W., Jackson County, on right bank 0.2 mi (0.3 km) downstream from French Gulch, 1.2 mi (1.9 km) downstream from Squaw Creek, 2.6 mi (4.2 km) northeast of Copper, and at mile 46.3 (74.5 km).

DRAINAGE AREA.--223 mi² (578 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,759.66 ft (536.344 m) above mean sea level.

AVERAGE DISCHARGE.--35 years, 443 ft³/s (12.5 m³/s), 321,000 acre-ft/yr (396 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,940 ft³/s (54.9 m³/s) Dec. 22, gage height, 5.05 ft (1.539 m); minimum, 28 ft³/s (0.79 m³/s) Sept. 13-18.

Period of record: Maximum discharge, 29,000 ft³/s (821 m³/s) Dec. 22, 1964, gage height, 26.00 ft (7.925 m), from floodmark, from rating curve extended above 11,500 ft³/s (326 m³/s) on basis of three slope-area measurements of peak flows made in 1950, 1955, and 1964; minimum, 20 ft³/s (0.57 m³/s) Sept. 23-25, 1939.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Some storage during winter in Squaw Lakes Reservoir, capacity, 1,100 acre-ft (1.36 hm³) on Squaw Creek above station. Diversions for irrigation above station in Applegate River basin; Grand Applegate ditch diverts around station on left bank; also diversions above station for irrigation into Thompson Creek basin. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	57	90	210	258	463	273	449	222	72	38	34
2	48	64	85	200	252	400	258	469	208	69	38	33
3	48	96	109	191	246	376	252	479	194	67	38	32
4	47	191	96	199	248	348	258	464	180	65	38	31
5	47	136	81	191	294	324	294	415	166	65	38	30
6	45	90	88	189	294	321	341	417	157	64	38	30
7	44	92	83	164	288	300	362	418	148	64	38	32
8	44	85	72	174	285	288	362	425	143	64	38	34
9	49	81	70	174	291	279	404	428	138	60	38	33
10	72	96	70	169	312	327	447	413	132	56	40	32
11	109	88	70	218	291	324	515	414	125	55	40	30
12	94	78	70	1,250	282	297	551	455	123	54	38	30
13	66	83	70	1,640	261	288	572	552	124	53	36	29
14	61	78	75	952	258	270	493	647	121	52	36	29
15	59	72	80	840	243	261	463	637	120	50	34	29
16	56	75	90	1,410	234	270	472	603	120	50	34	29
17	54	72	500	920	234	267	548	601	131	48	34	28
18	56	72	800	758	226	252	453	563	121	48	34	29
19	54	90	1,000	627	220	315	404	491	109	48	34	47
20	49	88	650	531	218	297	369	423	103	48	34	69
21	49	78	800	471	218	294	349	369	100	50	34	47
22	49	81	1,800	414	215	282	370	337	96	50	34	40
23	50	77	1,000	379	215	276	413	322	94	50	34	70
24	50	77	750	376	255	282	420	381	89	48	36	78
25	49	73	500	362	407	294	461	344	87	48	37	81
26	49	107	400	324	425	306	558	297	85	44	37	55
27	49	153	350	312	439	303	649	269	81	42	37	51
28	52	114	300	297	404	297	602	254	79	40	37	50
29	54	107	260	291	------	279	510	241	76	40	35	45
30	54	96	240	291	------	288	461	237	74	40	34	47
31	53	------	220	276	------	285	------	239	------	40	34	------
TOTAL	1,712	2,747	10,869	14,800	7,811	9,453	12,886	13,053	3,746	1,644	1,125	1,234
MEAN	55.2	91.6	351	477	279	305	429	421	125	53.0	36.3	41.1
MAX	109	191	1,800	1,640	439	463	649	647	222	72	40	81
MIN	44	57	70	164	215	252	252	237	74	40	34	28
AC-FT	3,400	5,450	21,560	29,360	15,490	18,750	25,560	25,890	7,430	3,260	2,230	2,450

CAL YR 1972 TOTAL 195,348 MEAN 534 MAX 10,700 MIN 37 AC-FT 387,500
WTR YR 1973 TOTAL 81,078 MEAN 222 MAX 1,800 MIN 28 AC-FT 160,800

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

14366000 APPLEGATE RIVER NEAR APPLEGATE, OREG.

LOCATION.--Lat 42°14'30", long 123°08'20", in NE¼ sec.26, T.38 S., R.4 W., Jackson County, on left bank 0.9 mi (1.4 km) downstream from Keeler Creek, 1.8 mi (2.9 km) southeast of Applegate, and at mile 26.7 (43.0 km).

DRAINAGE AREA.--483 mi² (1,251 km²).

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,285.33 ft (391.769 m) above mean sea level. Prior to Dec. 23, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 547 ft³/s (15.5 m³/s), 396,300 acre-ft/yr (489 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,440 ft³/s (69.1 m³/s) Dec. 22, gage height, 4.78 ft (1.457 m); minimum, 9.5 ft³/s (0.269 m³/s) Aug. 2, 3.

Period of record: Maximum discharge, 45,700 ft³/s (1,294 m³/s) Dec. 22, 1964, gage height, 19.57 ft (5.965 m), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of average of slope-area measurements of flow at gage heights 18.00 ft (5.486 m) and 19.57 ft (5.965 m); minimum, 7.0 ft³/s (0.198 m³/s) Sept. 18, 1945, Aug. 28, 1951, Sept. 15, 1960.

Flood of Feb. 20, 1927, reached a stage of 18.7 ft (5.70 m), from floodmarks.

REMARKS.--Records good. No appreciable regulation. Many diversions for irrigation above station. McDonald Creek Canal diverts from McDonald Creek above station for irrigation in Bear Creek basin. Thompson Creek Irrigation Association ditch diverts above station for irrigation in Thompson Creek basin. Fowler-Keeler and Berryman ditches divert above station for irrigation below. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	78	120	265	332	530	352	493	247	40	10	13
2	62	86	116	265	324	475	336	505	232	42	10	11
3	56	88	138	252	316	443	324	536	219	39	10	11
4	58	208	144	226	312	416	324	538	200	35	11	11
5	57	205	118	211	352	389	372	472	181	32	12	11
6	56	131	118	220	364	385	400	473	160	32	12	12
7	51	118	120	188	356	360	440	472	148	33	13	12
8	51	118	110	182	348	344	440	479	138	32	12	13
9	58	108	100	208	352	336	480	494	130	29	14	14
10	86	120	95	194	376	372	520	471	127	27	16	13
11	116	118	95	229	360	398	600	464	118	24	16	12
12	138	110	95	1,230	348	360	640	497	111	24	15	11
13	99	104	95	1,950	324	352	690	598	111	23	15	12
14	88	110	100	1,220	316	332	591	751	110	22	14	10
15	85	101	110	902	308	320	554	781	112	24	12	10
16	80	102	118	1,790	293	324	542	736	111	19	12	10
17	75	101	692	1,230	290	336	641	729	119	19	13	10
18	75	97	1,030	958	279	312	549	697	111	18	13	10
19	75	108	1,250	800	276	376	488	622	98	18	14	15
20	71	124	860	668	272	394	442	539	96	19	14	35
21	68	110	1,160	595	269	380	414	468	85	20	12	30
22	68	108	2,080	525	269	368	422	423	84	20	13	19
23	71	104	1,180	480	265	356	472	392	79	22	12	26
24	69	101	979	461	283	360	477	434	73	19	14	43
25	69	99	680	466	448	368	500	448	65	19	15	64
26	68	108	535	416	461	380	582	369	61	18	16	45
27	66	182	461	403	525	376	705	329	52	18	14	38
28	68	154	407	385	470	376	693	301	49	17	14	35
29	74	140	348	368	------	352	589	276	48	17	14	30
30	74	128	320	364	------	360	520	262	44	15	14	27
31	75	------	293	360	------	364	------	265	------	12	14	------
TOTAL	2,268	3,569	14,067	18,011	9,488	11,594	15,099	15,314	3,519	748	410	613
MEAN	73.2	119	454	581	339	374	503	494	117	24.1	13.2	20.4
MAX	138	208	2,080	1,950	525	530	705	781	247	42	16	64
MIN	51	78	95	182	265	312	324	262	44	12	10	10
AC-FT	4,500	7,080	27,900	35,720	18,820	23,000	29,950	30,380	6,980	1,480	813	1,220

CAL YR 1972 TOTAL 243,786 MEAN 666 MAX 12,600 MIN 23 AC-FT 483,500
WTR YR 1973 TOTAL 94,700 MEAN 259 MAX 2,080 MIN 10 AC-FT 187,800

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

14371500 GRAVE CREEK AT PEASE BRIDGE, NEAR PLACER, OREG.

LOCATION.--Lat 42°38'30", long 123°12'40", in SE¼ sec.6, T.34 S., R.4 W., Josephine County, on right bank 0.5 mi (0.8 km) downstream from Pease Bridge, 0.5 mi (0.8 km) upstream from Boulder Creek, 5.4 mi (8.7 km) east of Placer, and at mile 27.1 (43.6 km).

DRAINAGE AREA.--22.1 mi^2 (57.2 km^2) at measuring site 0.5 mi (0.8 km) upstream.

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1945 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 2,354.2 ft (717.56 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Aug. 4, 1955, at sites 0.5 mi (0.8 km) upstream at datum 29.9 ft (9.11 m) higher.

AVERAGE DISCHARGE.--28 years (1945-73), 59.6 ft^3/s (1.69 m^3/s), 36.62 in/yr (930 mm/yr), 43,180 acre-ft/yr (53.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 793 ft^3/s (22.5 m^3/s) Jan. 12, gage height, 4.56 ft (1.390 m); minimum, 0.35 ft^3/s (0.010 m^3/s) Aug. 13-16.

Period of record: Maximum discharge, 6,240 ft^3/s (177 m^3/s) Dec. 22, 1964, gage height, 11.20 ft (3.414 m), from rating curve extended above 1,200 ft^3/s (34.0 m^3/s) on basis of slope-area measurement at gage height 9.66 ft (2.944 m); minimum, 0.12 ft^3/s (0.003 m^3/s) July 15, 1970.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No regulation. One small diversion above station. Prior to 1945, Columbia upper ditch diverted water about 2 mi (3 km) above station, bypassing station. All records given herein are for measuring site.

REVISIONS.--WSP 1738: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	6.5	8.9	34	47	56	87	24	6.8	2.1	.55	.46
2	5.5	9.0	8.0	34	44	52	83	22	6.7	1.9	.55	.46
3	5.2	11	15	32	43	51	83	20	6.4	1.8	.55	.46
4	5.0	14	13	29	50	51	87	20	6.1	1.7	.55	.43
5	5.0	11	11	26	85	50	92	20	5.8	1.6	.55	.40
6	5.0	8.0	10	24	99	58	87	19	5.4	1.6	.55	.40
7	4.8	6.6	9.5	22	85	45	74	18	5.2	1.5	.55	.40
8	4.8	7.0	9.0	20	78	42	64	18	4.9	1.5	.55	.40
9	4.5	8.6	8.5	20	85	40	58	17	4.8	1.3	.55	.43
10	4.5	12	7.8	21	90	59	54	16	5.0	1.3	.55	.46
11	11	9.0	7.5	72	77	68	51	16	4.7	1.3	.55	.43
12	8.0	8.0	7.0	568	65	60	49	16	4.8	1.2	.58	.40
13	6.5	6.5	6.5	435	56	58	52	14	5.0	1.1	.55	.37
14	6.0	5.5	6.8	233	52	53	45	13	4.9	1.1	.55	.37
15	6.0	5.0	6.6	158	48	53	41	12	5.0	.96	.50	.37
16	5.5	4.5	10	269	45	54	39	11	5.2	.92	.50	.37
17	5.0	4.0	129	219	45	56	44	11	6.4	.89	.50	.40
18	4.5	4.4	214	168	42	53	43	10	5.8	.86	.55	.43
19	4.5	8.3	317	125	40	90	46	9.9	5.0	.88	.55	.76
20	4.2	13	222	93	37	105	51	9.6	4.4	.86	.50	3.1
21	4.0	15	239	75	34	90	52	9.3	3.8	.87	.48	2.4
22	4.0	18	421	62	33	80	50	8.8	3.4	.92	.48	3.0
23	3.8	13	245	53	32	77	46	8.8	3.3	.90	.48	11
24	3.8	12	230	53	34	81	40	11	3.0	.89	.48	8.6
25	3.6	10	135	62	42	88	36	11	2.9	.83	.50	7.4
26	3.6	16	88	53	45	85	34	9.7	3.0	.74	.57	4.6
27	3.6	20	74	48	49	75	32	8.7	2.4	.70	.58	2.8
28	4.5	15	64	46	46	67	30	8.1	2.1	.65	.55	2.1
29	6.0	13	53	43	------	60	28	7.6	2.0	.63	.52	1.8
30	5.0	10	45	47	------	72	26	7.1	2.0	.61	.49	1.6
31	4.5	------	39	51	------	93	------	7.1	------	.54	.46	------
TOTAL	158.4	303.9	2.660.1	3.193	1.528	2.014	1.604	413.7	134.2	34.65	16.42	56.60
MEAN	5.11	10.1	85.8	103	54.6	65.0	53.5	13.3	4.54	1.12	.53	1.89
MAX	11	20	421	568	99	105	92	24	6.8	2.1	.58	11
MIN	3.6	4.0	6.5	20	32	40	26	7.1	2.0	.54	.46	.37
CFSM	.23	.46	3.88	4.66	2.47	2.94	2.42	.60	.21	.05	.02	.09
IN.	.27	.51	4.48	5.37	2.57	3.39	2.70	.70	.23	.06	.03	.10
AC-FT	314	603	5.280	6.330	3.030	3.990	3.180	821	270	69	33	112

CAL YR 1972 TOTAL 23.703.27 MEAN 64.8 MAX 1.290 MIN .55 CFSM 2.93 IN 39.90 AC-FT 47.020
WTR YR 1973 TOTAL 12.118.97 MEAN 33.2 MAX 568 MIN .37 CFSM 1.50 IN 20.40 AC-FT 24.040

PEAK DISCHARGE (BASE, 850 CFS).--No peak above base.

NOTE.--No gage-height record Oct. 1 to Nov. 7.

14372300 ROGUE RIVER NEAR AGNESS, OREG.

LOCATION.--Lat 42°34'50", long 124°03'30", in NE¼NW¼ sec.6, T.35 S., R.11 W., Curry County, on left bank 0.8 mi (1.3 km) upstream from Shasta Costa Creek, 1.5 mi (2.4 km) north of Agness, 2.6 mi (4.2 km) upstream from Illinois River, and at mile 29.7 (47.8 km).

DRAINAGE AREA.--3,939 mi² (10,202 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.81 ft (34.689 m) above mean sea level (levels by U.S. Bureau of Public Roads).

AVERAGE DISCHARGE.--13 years, 6,327 ft³/s (179 m³/s), 4,584,000 acre-ft/yr (5.65 km³/yr).

EXTREMES.--Current year: Maximum discharge, 27,500 ft³/s (779 m³/s) Dec. 22; maximum gage height, 11.4 ft (3.47 m) Dec. 22, from floodmark; minimum discharge, 785 ft³/s (22.2m³/s) Aug. 17.
Period of record: Maximum discharge, 290,000 ft³/s (8,210 m³/s) Dec. 23, 1964, from slope-area measurement; maximum gage height, 68.03 ft (20.736 m) Dec. 23, 1964, from floodmark (backwater from Illinois River); minimum discharge, 608 ft³/s (17.2 m³/s) July 9, 10, 1968.

REMARKS.--Records good. Occasional diurnal fluctuation caused by powerplants upstream; slight regulation by Fish Lake and Emigrant Lake. Many diversions for irrigation and mining. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,800	1,850	2,150	4,400	6,070	5,430	6,490	3,570	2,130	1,110	876	932
2	1,710	1,890	2,110	4,200	5,530	5,770	6,070	3,340	2,070	1,130	852	956
3	1,660	2,140	2,390	4,090	5,190	5,410	5,610	3,280	1,980	1,110	852	964
4	1,630	2,440	3,150	3,890	4,990	5,130	5,250	3,400	1,860	1,050	852	948
5	1,660	2,730	2,830	3,550	5,370	4,890	5,050	3,600	1,710	1,050	852	940
6	1,660	2,830	2,560	3,310	6,360	4,670	4,970	3,330	1,690	1,040	884	932
7	1,660	2,470	2,380	3,280	6,030	4,430	4,830	3,190	1,610	1,030	884	940
8	1,650	2,260	2,250	3,050	5,550	4,160	4,590	3,100	1,540	1,040	876	916
9	1,650	2,270	1,860	2,950	5,390	4,070	4,330	3,050	1,420	1,050	860	948
10	2,310	2,600	1,690	3,130	5,370	4,240	4,310	3,010	1,440	1,040	868	940
11	2,410	2,450	1,810	3,530	5,330	5,210	4,150	2,900	1,460	1,000	860	940
12	2,560	2,250	1,960	7,960	5,270	5,530	4,020	2,840	1,440	996	868	948
13	2,340	2,150	2,120	22,200	5,030	5,170	3,880	2,830	1,400	996	892	924
14	2,070	2,080	2,230	16,100	4,710	5,030	5,290	3,030	1,370	996	852	908
15	1,990	2,050	2,080	11,400	4,490	4,770	4,610	3,290	1,380	988	844	916
16	1,930	2,000	3,530	17,600	4,310	4,630	4,310	3,410	1,400	980	820	916
17	1,890	1,970	12,100	22,900	4,090	4,850	4,270	3,340	1,480	964	806	940
18	1,860	1,990	14,300	15,000	3,930	4,950	5,010	3,360	1,560	940	820	964
19	1,850	2,820	16,300	12,000	3,800	5,690	4,890	3,280	1,650	932	828	1,030
20	1,840	3,120	14,900	10,000	3,660	7,760	4,850	3,060	1,500	948	844	1,140
21	1,830	2,820	11,000	9,000	3,520	7,260	4,610	2,910	1,390	940	844	1,200
22	1,810	2,530	24,000	8,000	3,410	6,780	4,310	2,690	1,310	972	844	1,260
23	1,800	2,400	19,000	7,500	3,310	6,290	4,240	2,520	1,280	980	844	1,370
24	1,780	2,260	16,000	7,000	3,390	5,750	4,150	2,480	1,290	980	884	1,540
25	1,770	2,170	12,000	8,330	4,690	5,530	4,020	2,740	1,290	964	916	1,750
26	1,750	2,120	8,000	9,290	4,790	5,310	3,890	3,160	1,280	924	956	1,730
27	1,740	2,210	6,000	7,480	5,090	5,110	3,970	2,700	1,220	916	996	2,110
28	1,780	2,710	6,500	6,510	5,010	4,990	4,200	2,430	1,170	900	980	1,310
29	1,850	2,410	5,500	6,010	------	4,670	4,110	2,310	1,120	884	972	1,230
30	1,880	2,250	5,000	5,770	------	4,650	3,860	2,150	1,110	892	940	1,190
31	1,840	------	4,800	6,270	------	5,830	------	2,060	------	884	916	------
TOTAL	57,960	70,240	212,500	255,700	133,680	163,960	138,140	92,360	44,550	30,626	27,182	33,732
MEAN	1,870	2,341	6,855	8,248	4,774	5,289	4,605	2,979	1,485	988	877	1,124
MAX	2,560	3,120	24,000	22,900	6,360	7,760	6,490	3,600	2,130	1,130	996	2,110
MIN	1,630	1,850	1,690	2,950	3,310	4,070	3,860	2,060	1,110	884	806	908
AC-FT	115,000	139,300	421,500	507,200	265,200	325,200	274,000	183,200	88,360	60,750	53,920	66,910

CAL YR 1972 TOTAL 2,917,780 MEAN 7,972 MAX 132,000 MIN 1,430 AC-FT 5,787,000
WTR YR 1973 TOTAL 1,260,630 MEAN 3,454 MAX 24,000 MIN 806 AC-FT 2,500,000

PEAK DISCHARGE (BASE, 35,000 CFS).--No peak above base.

NOTE.--No gage-height record Dec. 21 to Jan. 3.

14372500 EAST FORK ILLINOIS RIVER NEAR TAKILMA, OREG.

LOCATION.--Lat 42°00'10", long 123°37'30", in SE¼NE¼ sec.15, T.41 S., R.8 W., Josephine County, on right bank 0.3 mi (0.5 km) downstream from Dunn Creek (California-Oregon State line), 3.4 mi (5.5 km) south of Takilma, and at mile 71.2 (114.6 km).

DRAINAGE AREA.--42.3 mi^2 (109.6 km^2).

PERIOD OF RECORD.--April to September 1926, April 1927 to April 1932, October 1940 to current year. Monthly discharge only for some periods, published in WSP 1318. Records prior to 1942 water year not equivalent owing to large diversions.

GAGE.--Water-stage recorder. Altitude of gage is 1,780 ft (543 m), from topographic map. Prior to Oct. 31, 1946, nonrecording gage at sites 0.6 mi (1.0 km) downstream at different datums. Oct. 31, 1946, to May 13, 1949, nonrecording gage and May 14, 1949, to Aug. 23, 1965, water-stage recorder at site 0.6 mi (1.0 km) downstream at datum 1,746.6 ft (532.36 m) above mean sea level.

AVERAGE DISCHARGE.--32 years (1941-73), 182 ft^3/s (5.15 m^3/s), 58.43 in/yr (1,484 mm/yr), 131,900 acre-ft/yr (163 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,710 ft^3/s (48.4 m^3/s) Dec. 22, gage height, 6.06 ft (1.847 m); minimum, 6.9 ft^3/s (0.195 m^3/s) Sept. 11-14, 16, 17.

Period of record: Maximum discharge, 15,700 ft^3/s (445 m^3/s) Dec. 22, 1964, gage height, 14.90 ft (4.542 m), present site and datum, from floodmark, from rating curve extended above 4,400 ft^3/s (125 m^3/s) on basis of slope-area measurement of peak flow; minimum, 4.6 ft^3/s (0.130 m^3/s) Nov. 3, 1960.

REMARKS.--Records good. No regulation. Two small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1184: 1948. WSP 1288: 1951(P). WSP 1398: 1946, 1947(M), 1949. WSP 1738: Drainage area (former site).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	48	120	145	267	210	122	57	23	10	7.5
2	11	16	46	115	127	234	185	125	53	22	11	7.5
3	11	27	84	104	117	207	167	127	51	22	11	7.3
4	11	111	83	95	123	187	163	129	49	21	10	7.3
5	11	68	67	88	225	163	183	113	47	20	10	7.1
6	11	55	60	83	225	155	210	110	46	20	10	7.1
7	10	66	53	76	199	139	195	108	44	19	10	7.5
8	10	57	47	74	183	127	179	108	42	18	10	7.5
9	12	58	44	72	191	118	179	113	42	18	10	7.3
10	16	70	42	72	218	161	181	107	40	17	10	7.3
11	25	73	40	102	199	175	199	105	39	16	10	7.1
12	20	58	38	792	177	155	205	118	38	15	10	6.9
13	15	55	38	761	151	138	193	145	39	15	9.8	6.9
14	13	53	38	463	138	122	169	169	37	14	9.8	7.1
15	12	47	39	369	125	110	153	155	37	14	9.8	7.1
16	11	53	136	792	113	111	153	141	38	14	9.8	7.1
17	11	49	1.320	551	107	110	191	143	46	13	9.5	7.1
18	11	50	995	455	102	107	161	136	40	13	9.5	7.5
19	11	70	860	359	95	185	141	113	37	13	9.5	12
20	10	90	567	275	89	195	127	95	35	13	9.5	21
21	10	70	571	257	87	189	120	83	34	13	9.3	14
22	10	63	1.360	229	85	175	125	76	33	12	9.3	13
23	10	57	870	197	84	163	138	76	32	12	8.6	28
24	10	53	765	207	111	169	138	90	30	12	8.2	49
25	9.5	50	427	270	221	191	151	83	29	12	8.9	34
26	9.3	67	278	232	262	197	181	70	28	12	8.5	22
27	9.5	78	270	199	257	177	199	65	27	11	8.3	17
28	13	62	255	161	221	153	177	64	26	11	8.0	15
29	13	56	210	141	------	134	149	64	25	11	7.8	14
30	12	52	169	147	------	171	130	66	24	11	7.8	13
31	11	------	138	165	------	216	------	62	------	9.9	7.8	------
TOTAL	371.3	1.747	9.958	8.023	4.377	5.101	5.052	3.281	1.145	466.9	291.7	382.2
MEAN	12.0	58.2	321	259	156	165	168	106	38.2	15.1	9.41	12.7
MAX	25	111	1.360	792	262	267	210	169	57	23	11	49
MIN	9.3	13	38	72	84	107	120	62	24	9.9	7.8	6.9
CFSM	.28	1.38	7.59	6.12	3.69	3.90	3.97	2.51	.90	.36	.22	.30
IN.	.33	1.54	8.76	7.06	3.85	4.49	4.44	2.89	1.01	.41	.26	.34
AC-FT	736	3.470	19.750	15.910	8.680	10.120	10.020	6.510	2.270	926	579	758

CAL YR 1972 TOTAL 70.430.9 MEAN 192 MAX 5.750 MIN 8.8 CFSM 4.54 IN 61.94 AC-FT 139.700
WTR YR 1973 TOTAL 40.196.1 MEAN 110 MAX 1.360 MIN 6.9 CFSM 2.60 IN 35.35 AC-FT 79.730

PEAK DISCHARGE (BASE, 2,500 CFS).--No peak above base.

14375100 SUCKER CREEK BELOW LITTLE GRAYBACK CREEK, NEAR HOLLAND, OREG.

LOCATION.--Lat 42°09'35", long 123°28'40", in NE¼SW¼ sec.24, T.39 S., R.7 W., Josephine County, on right bank 500 ft (152 m) downstream from Little Grayback Creek, 2.0 mi (3.2 km) downstream from Grayback Creek, 3.7 mi (6.0 km) northeast of Holland, and at mile 9.3 (15.0 km).

DRAINAGE AREA.--83.9 mi^2 (217.3 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,700 ft (518 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 248 ft^3/s (7.02 m^3/s), 40.14 in/yr (1,020 mm/yr), 179,700 acre-ft/yr (222 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,130 ft^3/s (32.0 m^3/s) Dec. 22, gage height, 3.61 ft (1.100 m); minimum, 20 ft^3/s (0.57 m^3/s) Sept. 12, 13.

Period of record: Maximum discharge, 6,720 ft^3/s (190 m^3/s) Jan. 17, 1971, gage height, 7.50 ft (2.286 m); minimum, 20 ft^3/s (0.57 m^3/s) Sept. 12, 13, 1973.

Maximum stage since at least 1940, 10.8 ft (3.292 m) on Dec. 22, 1964, from floodmark, discharge, 19,300 ft^3/s (547 m^3/s), from estimate based on slope-area measurement of peak flow at site 0.7 mi (1.1 km) upstream.

REMARKS.--Records fair. Grayback Canal and 3 small diversions from Grayback and Cave Creeks divert water for domestic use and irrigation above station. Return flow from these diversions enters creek above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	46	84	165	183	285	220	192	104	46	30	24
2	32	49	73	160	174	265	215	196	97	46	29	23
3	32	87	156	144	169	260	210	196	94	46	29	22
4	32	140	104	124	174	250	205	201	87	44	29	22
5	32	81	107	113	235	230	215	183	81	44	28	22
6	32	62	113	107	250	225	220	183	79	44	28	22
7	30	70	104	97	240	205	210	183	76	44	29	24
8	32	73	76	94	235	192	205	187	73	42	28	24
9	35	73	73	90	245	187	210	183	73	42	28	23
10	55	79	46	87	260	225	215	178	70	42	28	22
11	81	81	42	107	240	220	230	178	65	42	26	21
12	55	79	46	438	225	205	235	196	67	40	25	21
13	40	84	40	582	205	201	235	240	67	40	25	21
14	44	76	37	468	201	192	215	290	65	38	25	22
15	35	67	42	444	187	183	205	275	67	38	25	22
16	34	70	144	790	178	187	205	270	67	38	24	22
17	34	62	699	630	174	187	245	275	79	35	25	22
18	34	62	686	570	165	178	210	255	67	35	25	24
19	34	110	816	480	160	220	192	220	59	37	24	35
20	34	107	570	384	152	210	178	187	57	37	24	37
21	33	117	636	327	148	210	169	169	55	35	24	29
22	34	136	1,010	280	144	205	174	156	55	35	24	29
23	34	136	790	245	140	205	183	152	55	35	24	38
24	33	128	699	250	165	220	178	178	53	35	26	49
25	33	120	492	285	230	245	187	160	53	33	28	37
26	33	128	372	260	245	245	215	144	53	33	26	29
27	34	128	344	235	250	225	245	132	51	33	25	28
28	40	113	285	210	235	205	225	124	51	32	24	26
29	40	107	240	196	------	183	205	120	51	32	24	25
30	37	97	210	196	------	210	192	120	49	32	23	25
31	37	------	187	192	------	230	------	113	------	30	24	------
TOTAL	1,158	2,768	9,323	8,750	5,609	6,690	6,248	5,836	2,020	1,185	806	790
MEAN	37.4	92.3	301	282	200	216	208	188	67.3	38.2	26.0	26.3
MAX	81	140	1,010	790	260	285	245	290	104	46	30	49
MIN	30	46	37	87	140	178	169	113	49	30	23	21
CFSM	.45	1.10	3.59	3.36	2.38	2.57	2.48	2.24	.80	.46	.31	.31
IN.	.51	1.23	4.13	3.88	2.49	2.97	2.77	2.59	.90	.53	.36	.35
AC-FT	2,300	5,490	18,490	17,360	11,130	13,270	12,390	11,580	4,010	2,350	1,600	1,570

CAL YR 1972 TOTAL 109,229 MEAN 298 MAX 5,300 MIN 28 CFSM 3.55 IN 48.43 AC-FT 216,700
WTR YR 1973 TOTAL 51,183 MEAN 140 MAX 1,010 MIN 21 CFSM 1.67 IN 22.69 AC-FT 101,500

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

14375500 WEST FORK ILLINOIS RIVER BELOW ROCK CREEK, NEAR O'BRIEN, OREG.

LOCATION.--Lat 42°02'20", long 123°44'50", in SW¼SE¼ sec.34, T.40 S., R.9 W., Josephine County, on left bank 0.2 mi (0.3 km) downstream from Rock Creek, 3.0 mi (4.8 km) southwest of O'Brien, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--42.4 mi² (109.8 km²).

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,516.14 ft (462.119 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 217 ft³/s (6.15 m³/s), 69.50 in/yr (1,765 mm/yr). 157,200 acre-ft/yr (194 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,410 ft³/s (96.6 m³/s) Dec. 17, gage height, 8.90 ft (2.713 m); minimum, 2.5 ft³/s (0.071 m³/s) Aug. 15, 16, 20, 21, Sept. 5, 10-14.

Period of record: Maximum discharge, 16,100 ft³/s (456 m³/s) Dec. 22, 1964, gage height, 16.05 ft (4.892 m), from rating curve extended above 6,200 ft³/s (176 m³/s), on basis of slope-area measurement at gage height 14.79 ft (4.508 m); minimum, 2.5 ft³/s (0.071 m³/s) Aug. 15, 16, 20, 21, Sept. 5, 10-14.

REMARKS.--Records excellent. Occasional diurnal fluctuation caused by logpond upstream. Three small diversions from Elk Creek for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	17	39	135	261	672	298	47	19	9.7	3.7	3.2
2	6.1	22	37	124	215	493	263	46	16	8.8	3.7	3.0
3	5.8	51	147	112	187	394	218	44	17	9.1	3.4	2.8
4	5.8	111	148	100	187	348	188	48	17	8.5	3.4	2.8
5	5.6	68	113	92	482	272	159	44	16	8.5	3.4	2.6
6	5.6	54	95	86	415	253	148	42	16	8.3	3.4	2.8
7	5.4	96	77	79	308	215	131	40	16	8.3	3.4	3.2
8	5.6	76	66	76	248	184	119	39	15	8.0	3.4	3.0
9	5.6	89	57	73	231	163	109	38	15	7.7	3.4	2.8
10	6.3	125	51	81	391	227	100	37	15	7.5	3.4	2.8
11	11	118	49	263	380	246	94	36	14	7.0	3.4	2.6
12	31	82	49	1,700	378	218	88	34	15	6.7	3.2	2.6
13	23	64	45	1,320	313	190	84	33	17	6.2	3.0	2.5
14	18	54	42	684	253	163	78	31	16	6.7	3.0	2.8
15	12	48	43	466	215	143	75	30	16	5.7	2.8	3.0
16	10	46	716	1,480	185	154	74	29	16	6.2	2.8	3.0
17	9.0	43	2,780	1,080	163	172	84	28	24	6.0	2.8	3.2
18	8.6	65	1,490	864	147	168	83	27	19	5.7	2.8	3.4
19	8.4	401	1,400	688	134	378	89	27	17	5.7	2.8	12
20	8.2	272	796	489	122	397	82	27	15	6.0	2.8	36
21	7.9	155	872	517	113	394	77	25	14	6.2	2.8	18
22	7.9	133	2,220	406	107	348	72	25	14	6.2	3.0	16
23	7.9	103	1,260	308	100	293	68	25	14	6.0	3.0	61
24	7.6	82	1,100	549	111	272	64	37	13	6.0	3.7	110
25	7.1	68	552	824	196	263	61	31	12	5.7	4.3	77
26	7.1	58	335	528	255	236	57	28	12	5.2	4.1	38
27	7.1	52	350	360	277	199	55	25	12	5.0	3.9	26
28	10	47	330	265	231	170	53	24	11	4.5	3.9	20
29	12	44	244	225	------	148	52	23	9.9	4.3	3.7	16
30	12	40	191	286	------	227	49	22	9.7	4.1	3.4	16
31	14	------	158	355	------	318	------	21	------	3.9	3.4	------
TOTAL	297.9	2,684	15,852	14,615	6,605	8,318	3,172	1,013	452.6	203.4	103.2	496.1
MEAN	9.61	89.5	511	471	236	268	106	32.7	15.1	6.56	3.33	16.5
MAX	31	401	2,780	1,700	482	672	298	48	24	9.7	4.3	110
MIN	5.4	17	37	73	100	143	49	21	9.7	3.9	2.8	2.5
CFSM	.23	2.11	12.1	11.1	5.57	6.32	2.50	.77	.36	.15	.08	.39
IN.	.26	2.35	13.91	12.82	5.79	7.30	2.78	.89	.40	.18	.09	.44
AC-FT	591	5,320	31,440	28,990	13,100	16,500	6,290	2,010	898	403	205	984

CAL YR 1972 TOTAL 86,981.5 MEAN 238 MAX 5,700 MIN 3.4 CFSM 5.61 IN 76.31 AC-FT 172,500
WTR YR 1973 TOTAL 53,812.2 MEAN 147 MAX 2,780 MIN 2.5 CFSM 3.47 IN 47.21 AC-FT 106,700

PEAK DISCHARGE (BASE, 2,500 CFS).--Dec. 17 (0730) 3,410 cfs (8.90 ft); Dec. 22 (1130) 2,860 cfs (8.35 ft).

14377100 ILLINOIS RIVER NEAR KERBY, OREG.

LOCATION.--Lat 42°13'55", long 123°39'45", in SE¼SE¼ sec.29, T.38 S., R.8 W., Josephine County, on right bank 1.6 mi (2.6 km) upstream from Josephine Creek, 2.5 mi (4.0 km) northwest of Kerby, and at mile 50.3 (80.9 km).

DRAINAGE AREA.--380 mi² (984 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,198.08 ft (365.175 m) above mean sea level. Prior to Jan. 28, 1965, water-stage recorder, and Jan. 28 to Sept. 30, 1965, nonrecording gage 700 ft (213 m) downstream at datum 2.99 ft (0.911 m) lower.

AVERAGE DISCHARGE.--12 years, 1,312 ft³/s (37.2 m³/s), 46.89 in/yr (1,191 mm/yr), 950,500 acre-ft/yr (1.17 km³/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft³/s (402 m³/s) Dec. 17, gage height, 18.79 ft (5.727 m); minimum, 18 ft³/s (0.51 m³/s) Aug. 23.

Period of record: Maximum discharge, 92,200 ft³/s (2,610 m³/s) Dec. 22, 1964, gage height, 45.28 ft (13.801 m), from floodmark, site and datum then in use, from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement of peak flow; minimum, 18 ft³/s (0.51 m³/s) Aug. 23, 1973.

REMARKS.--Records good. No regulation. Diversions for irrigation above station. Some diversions for mining and logpond operation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	99	237	893	1,460	2,670	1,690	510	226	74	29	25
2	62	108	222	817	1,250	2,250	1,530	476	212	70	29	27
3	62	122	585	745	1,100	1,910	1,370	452	204	68	29	27
4	64	389	761	669	1,080	1,740	1,240	465	200	66	30	27
5	57	477	561	601	2,430	1,490	1,190	449	184	64	27	25
6	56	313	501	557	2,260	1,420	1,160	427	162	62	27	24
7	57	393	421	497	1,780	1,270	1,080	414	158	60	25	24
8	53	401	400	457	1,520	1,120	993	417	154	58	27	24
9	54	373	360	429	1,480	1,000	943	417	145	56	29	22
10	74	573	340	425	1,870	1,180	908	398	140	53	28	23
11	108	569	340	1,160	1,850	1,390	916	392	135	48	27	22
12	193	481	320	6,380	1,760	1,250	912	389	130	47	28	22
13	164	397	320	6,130	1,520	1,120	891	420	125	45	28	22
14	138	357	315	3,670	1,330	993	820	503	125	44	27	22
15	125	313	313	2,630	1,190	887	760	516	125	43	26	24
16	113	297	1,870	6,470	1,050	883	729	493	130	46	25	24
17	102	285	11,200	5,500	945	1,000	845	482	140	41	27	23
18	97	281	7,100	4,000	865	930	792	479	160	44	27	24
19	95	917	7,200	3,300	797	1,760	756	433	130	38	25	33
20	89	1,110	4,440	2,500	725	2,140	702	389	120	39	38	42
21	89	665	4,130	2,500	681	2,140	658	350	110	36	24	65
22	86	581	9,510	2,000	645	1,950	629	323	105	37	21	69
23	86	497	6,030	1,720	6 9	1,720	629	308	100	37	20	178
24	84	425	5,670	2,040	641	1,630	611	338	95	37	20	308
25	80	365	3,180	3,750	1,240	1,630	596	383	90	36	21	401
26	78	329	2,170	2,640	1,530	1,560	607	326	88	33	23	221
27	76	345	1,990	1,990	1,780	1,380	650	294	84	33	24	158
28	84	317	1,900	1,610	1,460	1,210	643	274	82	33	25	129
29	93	281	1,510	1,390	------	1,060	586	258	80	35	23	109
30	102	257	1,240	1,480	------	1,230	540	249	76	30	24	99
31	95	------	1,030	1,830	------	1,720	------	239	------	30	25	------
TOTAL	2,780	12,317	76,166	70,780	36,848	45,633	26,376	12,263	4,015	1,443	808	2,242
MEAN	89.7	411	2,457	2,283	1,316	1,472	879	396	134	46.5	26.1	74.7
MAX	193	1,110	11,200	6,470	2,430	2,670	1,690	516	226	74	38	401
MIN	53	99	222	425	609	883	540	239	76	30	20	22
CFSM	.24	1.08	6.47	6.01	3.46	3.87	2.31	1.04	.35	.12	.07	.20
IN.	.27	1.21	7.46	6.93	3.61	4.47	2.58	1.20	.39	.14	.08	.22
AC-FT	5,510	24,430	151,100	140,400	73,090	90,510	52,320	24,320	7,960	2,860	1,600	4,450

CAL YR 1972 TOTAL 513,771 MEAN 1,404 MAX 32,000 MIN 27 CFSM 3.69 IN 50.30 AC-FT 1,019,000
WTR YR 1973 TOTAL 291,671 MEAN 799 MAX 11,200 MIN 20 CFSM 2.10 IN 28.55 AC-FT 578,500

PEAK DISCHARGE (BASE, 11,000 CFS).--Dec. 17 (1230) 14,200 cfs (18.79 ft); Dec. 22 (1400) 11,600 cfs (17.03 ft).

NOTE.--No gage-height record June 8 to July 10.

14378200 ILLINOIS RIVER NEAR AGNESS, OREG.

LOCATION.--Lat 42°31'15", long 124°02'35", in SW¼NW¼ sec.29, T.35 S., R.11 W., Curry County, on right bank 0.6 mi (1.0 km) downstream from Lawson Creek, 1.4 mi (2.3 km) upstream from Fox Creek, 2.8 mi (4.5 km) southeast of Agness, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--988 mi^2 (2,559 km^2), at cable section 2.1 mi (3.4 km) downstream where all measurements are made.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 125.86 ft (38.362 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 4,344 ft^3/s (123 m^3/s), 59.71 in/yr (1,517 mm/yr), 3,147,000 acre-ft/yr (3.88 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 49,600 ft^3/s (1,405 m^3/s) Dec. 17, gage height, 17.30 ft (5.273 m); minimum, 130 ft^3/s (3.68 m^3/s) Sept. 16, 17.

Period of record: Maximum discharge, 225,000 ft^3/s (6,370 m^3/s) Dec. 22, 1964, estimated on basis of runoff ratio with station near Selma; maximum gage height, 56.91 ft (17.346 m) Dec. 22, 1964, from floodmark (backwater from Rogue River); minimum discharge, 130 ft^3/s (3.68 m^3/s) Sept. 10, 11, 17, 1972, Sept. 16, 17, 1973.

REMARKS.--Records good except those above 22,000 ft^3/s (623 m^3/s), which are fair. No regulation. Many diversions above station for irrigation, mining, and logpond operation. Records include flow of Fox Creek. All records given herein are for measuring site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	254	807	3,610	5,370	8,930	4,750	1,520	713	337	177	140
2	194	550	751	3,370	4,680	8,220	4,410	1,450	686	332	177	137
3	190	750	1,350	3,130	4,200	6,880	4,120	1,390	663	328	172	137
4	190	1,100	2,270	2,880	4,010	6,160	3,880	1,410	648	321	172	137
5	187	1,600	1,750	2,640	6,350	5,350	3,750	1,380	629	323	172	140
6	187	968	1,580	2,450	7,240	5,100	3,650	1,300	595	311	168	144
7	178	1,420	1,320	2,280	5,940	4,600	3,450	1,260	561	301	168	146
8	178	1,160	1,120	2,160	5,130	4,180	3,200	1,230	545	296	161	148
9	187	1,180	989	2,100	4,890	3,860	3,030	1,210	518	287	160	148
10	238	2,370	912	2,160	5,730	4,300	2,880	1,180	491	283	160	148
11	334	2,230	863	3,950	5,940	4,800	2,800	1,140	492	277	160	141
12	375	1,590	905	19,700	5,680	4,370	2,730	1,120	485	267	160	141
13	395	1,280	856	22,600	5,150	4,090	2,630	1,110	495	259	156	139
14	338	1,110	807	14,000	4,730	3,760	2,470	1,150	477	252	156	139
15	306	947	793	10,500	4,360	3,450	2,310	1,210	475	248	149	140
16	286	863	5,230	24,900	4,020	3,460	2,220	1,160	494	240	145	137
17	270	786	38,200	21,600	3,690	3,730	2,450	1,120	592	238	144	139
18	258	926	25,400	15,900	3,430	3,600	2,410	1,110	587	235	144	149
19	250	2,890	25,700	13,500	3,200	6,030	2,370	1,070	565	227	144	318
20	246	3,700	16,300	9,720	2,960	6,970	2,230	1,010	502	235	144	794
21	242	2,390	13,800	8,380	2,770	6,620	2,090	943	478	228	144	526
22	238	1,960	32,900	7,060	2,610	6,080	2,010	901	453	227	152	505
23	234	1,680	22,300	5,970	2,490	5,390	1,960	871	432	220	145	1,340
24	230	1,430	20,800	6,590	2,740	4,990	1,890	1,160	419	220	144	1,490
25	226	1,230	12,100	10,500	7,060	4,830	1,820	1,100	406	220	150	1,440
26	222	1,130	8,190	8,630	7,350	4,630	1,790	1,000	417	214	152	1,000
27	218	1,060	7,090	6,780	7,660	4,280	1,790	906	400	204	152	710
28	230	1,020	6,570	5,640	6,320	3,920	1,780	853	380	197	152	560
29	262	933	5,420	5,020	------	3,580	1,690	807	367	188	148	455
30	250	856	4,600	5,130	------	3,760	1,600	772	342	185	145	394
31	250	------	4,040	6,380	------	4,610	------	739	------	186	141	------
TOTAL	7,579	41,363	265,713	259,230	135,700	154,530	80,160	34,582	15,307	7,886	4,814	12,082
MEAN	244	1,379	8,571	8,362	4,846	4,985	2,672	1,116	510	254	155	403
MAX	395	3,700	38,200	24,900	7,660	8,930	4,750	1,520	713	337	177	1,490
MIN	178	254	751	2,100	2,490	3,450	1,600	739	342	185	141	137
CFSM	.25	1.40	8.68	8.46	4.90	5.05	2.70	1.13	.52	.26	.16	.41
IN.	.29	1.56	10.00	9.76	5.11	5.82	3.02	1.30	.58	.30	.18	.45
AC-FT	15,030	82,040	527,000	514,200	269,200	306,500	159,000	68,590	30,360	15,640	9,550	23,960

CAL YR 1972 TOTAL 1,683,122 MEAN 4,599 MAX 98,400 MIN 148 CFSM 4.65 IN 63.37 AC-FT 3,338,000
WTR YR 1973 TOTAL 1,018,946 MEAN 2,792 MAX 38,200 MIN 137 CFSM 2.83 IN 38.37 AC-FT 2,021,000

PEAK DISCHARGE (BASE, 35,000 CFS).--Dec. 17 (1430) 49,600 cfs (17.30 ft); Dec. 22 (1600) 39,700 cfs (16.14 ft).

14400000 CHETCO RIVER NEAR BROOKINGS, OREG.

LOCATION.--Lat 42°07'25", long 124°11'10", in SE¼ sec.12, T.40 S., R.13 W., Curry County, on right bank 16 ft (5 m) upstream from bridge, 0.5 mi (0.8 km) upstream from Elk Creek, 6.8 mi (10.9 km) northeast of Brookings, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--271 mi² (702 km²).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 14,100 ft³/s (399 m³/s) Dec. 17, gage height, 11.71 ft (3.569 m); minimum, 57 ft³/s (1.61 m³/s) Sept. 8-15.

Period of record: Maximum discharge, 65,800 ft³/s (1,860 m³/s) Jan. 16, 1971, gage height, 27.45 ft (8.367 m); minimum recorded, 52 ft³/s (1.47 m³/s) Oct. 14, 15, 1970, but may have been lower during period of no gage-height record Oct. 16-27, 1970.

Flood of Dec. 22, 1964, reached a stage of 32.25 ft (9.830 m), from high-water mark on bridge pier, discharge, 85,400 ft³/s (2,420 m³/s), from rating curve extended above 45,000 ft³/s (1,270 m³/s).

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	82	490	2,300	2,900	7,030	2,410	536	313	173	81	65
2	70	139	465	2,130	2,300	5,400	2,170	515	301	168	84	65
3	68	657	1,480	1,940	2,100	4,340	1,960	502	295	163	81	60
4	65	1,990	1,640	1,800	2,100	3,820	1,790	536	283	159	79	60
5	64	1,100	1,190	1,700	4,500	3,240	1,780	489	271	150	79	60
6	64	648	1,050	1,620	4,200	3,210	1,600	463	260	150	76	60
7	63	1,410	874	1,520	3,400	2,840	1,460	450	254	146	76	60
8	62	1,030	745	1,460	2,700	2,510	1,330	437	249	142	79	57
9	65	1,060	666	1,450	2,500	2,220	1,230	431	233	137	76	60
10	93	2,010	621	1,510	3,200	3,050	1,160	418	227	129	76	60
11	166	1,900	572	3,610	3,800	3,290	1,110	398	222	129	79	60
12	179	1,290	590	10,500	3,700	2,780	1,060	385	238	124	76	60
13	144	940	540	10,800	3,400	2,450	1,000	373	254	120	76	57
14	114	735	500	9,140	2,900	2,130	928	367	233	116	76	60
15	99	599	508	6,450	2,400	1,860	865	355	222	113	73	60
16	88	532	5,010	11,300	2,100	2,000	907	343	260	113	71	60
17	82	465	12,900	10,300	1,900	2,220	1,110	331	418	109	71	60
18	79	648	11,800	8,590	1,750	2,080	1,030	319	418	109	71	60
19	76	3,740	11,500	7,000	1,600	4,320	1,020	307	337	109	68	60
20	74	3,380	10,200	5,040	1,500	4,180	928	301	289	113	68	159
21	73	1,970	10,500	4,540	1,400	3,750	865	289	254	113	68	725
22	72	1,630	11,400	3,780	1,250	3,350	816	283	233	109	68	437
23	70	1,330	11,000	3,120	1,170	2,980	788	313	227	106	71	431
24	69	1,090	10,400	3,200	1,270	2,680	753	879	216	106	73	431
25	67	907	7,180	6,400	4,480	2,500	711	809	222	106	81	648
26	65	803	4,760	5,600	4,450	2,280	690	550	233	102	79	958
27	64	715	4,410	4,000	4,660	2,040	662	457	211	95	76	662
28	70	648	4,010	3,000	3,640	1,790	634	418	197	91	73	509
29	82	585	3,390	2,700	------	1,570	599	385	187	88	71	418
30	81	528	2,940	2,700	------	1,790	571	355	177	88	68	361
31	74	------	2,610	3,300	------	2,510	------	331	------	84	68	------
TOTAL	2,572	34,561	135,941	142,500	77,270	92,210	33,937	13,325	7,734	3,760	2,312	6,883
MEAN	83.0	1,152	4,385	4,597	2,760	2,975	1,131	430	258	121	74.6	229
MAX	179	3,740	12,900	11,300	4,660	7,030	2,410	879	418	173	84	958
MIN	62	82	465	1,450	1,170	1,570	571	283	177	84	68	57
CFSM	.31	4.25	16.2	17.0	10.2	11.0	4.17	1.59	.95	.45	.28	.85
IN.	.35	4.74	18.66	19.56	10.61	12.66	4.66	1.83	1.06	.52	.32	.94
AC-FT	5,100	68,550	269,600	282,600	153,300	182,900	67,310	26,430	15,340	7,460	4,590	13,650

CAL YR 1972 TOTAL 904,445 MEAN 2,471 MAX 43,700 MIN 62 CFSM 9.12 IN 124.15 AC-FT 1,794,000
WTR YR 1973 TOTAL 553,005 MEAN 1,515 MAX 12,900 MIN 57 CFSM 5.59 IN 75.91 AC-FT 1,097,000

PEAK DISCHARGE (BASE, 20,000 CFS).--No peak above base.

Discharge at ungaged sites

Monthly records for the following sites have been computed by routing methods described in USGS Circular 550. Circular 550 contains monthly records for these sites for water years 1928-65, including monthly flows adjusted for major upstream storage. Figures given here represent unadjusted flows, and are rated fair. Adjusted records are available and will be published in water-supply papers at five-year intervals.

14144700 COLUMBIA RIVER AT VANCOUVER, WASH.--Lat 45°37'15", long 122°40'20", in NE¼NW¼ sec.34, T.2 N., R.1 E., Clark County, 5.0 mi (8.0 km) upstream from Willamette River, and at mile 106.5 (171.4 km). Drainage area, 241,000 mi^2 (624,200 km^2), approximately. Records available, monthly discharge October 1927 to current year. Daily discharge for October 1963 to September 1969, published in annual data reports for Oregon, 1965-67, 1969.

14211808 WILLAMETTE RIVER (mouth) AT PORTLAND, OREG.--Lat 45°37'09", long 122°47'27", Multnomah County, center of channel at bifurcation of Willamette River and Multnomah Channel, and at mile 3.4 (5.5 km). Drainage area 11,200 mi^2 (29,000 km^2), approximately. Records available monthly discharge October 1927 to September 1972. See station 14211720 for equivalent records for current year.

14222870 COLUMBIA RIVER AT ST. HELENS, OREG.--Lat 45°51'58", long 122°47'00", Columbia County, center of channel at intersection of Township (4/5N) line and Oregon-Washington boundary, 0.6 mi (1.0 km) east of St. Helens and at mile 86.0 (138.3 km). Drainage area, 253,900 mi^2 (657,600 km^2), approximately. Records available, monthly discharge October 1927 to current year.

14245300 COLUMBIA RIVER AT LONGVIEW, WASH.--Lat 46°06'22", long 122°57'14", Cowlitz County, at Longview Bridge, 1.0 mi (1.6 km) south of Longview, 2.0 mi (3.2 km) downstream from Cowlitz River, and at mile 66.0 (106.2 km). Drainage area, 256,700 mi^2 (413,000 km^2), approximately. Records available, monthly discharge October 1927 to current year.

14280000 COLUMBIA RIVER AT MOUTH, NEAR ASTORIA, OREG.--Lat 46°15', long 124°05', Clatsop County, center of channel at river mouth, due north from original end of south jetty, 12.3 mi (19.8 km) northwest of Astoria, and at mile 0. Drainage area, 258,000 mi^2 (415,100 km^2), approximately. Records available, monthly discharge October 1927 to current year.

MONTHLY AND ANNUAL MEAN DISCHARGE IN CUBIC FEET PER SECOND

WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
					14144700 COLUMBIA RIVER AT VANCOUVER WASH								
1973	122,700	138,100	178,400	168,000	148,000	163,100	147,400	155,300	151,700	135,200	131,300	108,000	145,600
					14222870 COLUMBIA RIVER AT ST. HELENS, OREG.								
1973	140,000	166,000	252,000	244,400	176,400	195,400	172,000	169,700	163,400	145,500	140,100	119,200	173,800
					14245300 COLUMBIA RIVER AT LONGVIEW, WASH.								
1973	147,100	176,300	275,400	261,500	185,300	205,600	178,300	175,600	167,400	149,000	144,200	123,500	182,600
					14280000 COLUMBIA RIVER AT MOUTH, NEAR ASTORIA, OREG.								
1973	145,800	184,400	292,300	271,200	189,600	213,900	180,900	177,400	172,000	148,500	144,900	128,000	187,500

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same or practically the same site.

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Siuslaw River basin				
†14306920	Siuslaw River near Lorane, Oreg.	Lat 43°51'05", long 123°22'10", in NE¼ sec.11, T.20 S., R.6 W., Lane County, on left bank 0.5 mile below Siuslaw Falls, 0.4 mile downstream from Russell Creek, 7 miles northwest of Lorane, and at mile 99.3.	81.8	1968-73	3-28-73 9- 6-73	168 *4.51
†14306940	Siuslaw River at Alma, Oreg.	Lat 43°52'55", long 123°29'30", in NE¼ sec.35, T.19 S., R.7 W., Lane County, on right and left banks 0.8 mile above Haight Creek, 1 mile southwest of Alma, and at mile 80.8.	120	1968-73	3-28-73 5-21-73 9- 6-73	234 *53.0 *6.26
†14306960	Esmond Creek near Austa, Oreg.	Lat 43°54'55", long 120°38'40", in NE¼ sec.16, T.19 S., R.8 W., Lane County, on right bank 200 ft below Leopold Creek, 6.2 miles south of Austa, and at mile 1.68.	15.6	1968-73	3-28-73 9- 6-73	40.0 *.40
†14306980	Wolf Creek near Austa, Oreg.	Lat 43°58'00", long 123°36'30", in NW¼ sec.36, T.18 S., R.8 W., Lane County, on right bank 1.1 miles below Saleratus Creek, 3.3 miles southeast of Austa, and at mile 1.5.	59.0	1968-73	3-28-73 9-12-73	137 6.72
†14307020	Chickahominy Creek near Walton, Oreg.	Lat 44°01'55", long 123°35'20", in SW¼ sec.6, T.18 S., R.7 W., Lane County, on left bank 0.4 mile west of Walton, and at mile 0.2.	12.5	1968-73	3- 1-73 -28-73 9- 6-73	58.5 35.3 *1.10
†14307050	Wildcat Creek near Austa, Oreg.	Lat 43°59'35", long 123°37'20", in NW¼ sec.23, T.18 S., R.8 W., Lane County, on right bank 1.0 mile below Fowler Creek, 1.5 miles southeast of Austa, and at mile 3.1.	51.9	1968-73	3- 1-73 9-12-73	200 *4.52
†14307500	Lake Creek at Triangle Lake, Oreg.	Lat 44°09'40", long 123°34'10", in SW¼ sec.20, T.16 S., R.7 W., Lane County, on right bank 600 ft downstream from outlet of Triangle Lake, and at mile 18.81.	52.5	1931-55‡, 1968-73	4-10-73 9- 6-73	138 *5.08
†14307570	Deadwood Creek near Deadwood, Oreg.	Lat 44°06'35", long 123°45'05", in SE¼ sec.10, T.17 S., R.9 W., Lane County, on left bank 1.0 mile north of Deadwood, and at mile 4.0.	57.4	1968-73	3-28-73 9- 6-73	196 *8.57
14307600	Indian Creek near Rainrock, Oreg.	Lat 44°06'45", long 123°50'55", in NE¼ sec.11, T.17 S., R.10 W., Lane County, on left bank 150 ft above Elk Creek, 2.6 miles north of Rainrock, and at mile 7.71.	37.0	1968-73	4-10-73 9- 6-73	126 16.7
†14307625	Knowles Creek near Mapleton, Oreg.	Lat 44°01'40", long 123°50'10", in NE¼ sec.12, T.18 S., R.10 W., Lane County, on right bank 1.0 mile east of Mapleton, 1.2 miles downstream from Jackson Creek, 3.0 miles southwest of Swisshome, and at mile 2.8.	17.7	1968-73	3- 1-73 4-12-73 9-11-73	102 14.9 *.30
†14307630	Sweet Creek near Beck, Oreg.	Lat 43°59'10", long 123°54'10", in NW¼ sec.28, T.18 S., R.10 W., Lane County, on both banks 1.3 miles downstream from Cedar Creek, 3.4 miles southwest of Mapleton, and at mile 3.3.	19.8	1968-73	3-28-73 4-12-73 9-11-73	62.5 43.4 *2.84
†14307648	Condon Creek near Minerva, Oreg.	Lat 44°03'20", long 124°00'30", in NE¼ sec.33, T.17 S., R.11 W., Lane County, on right bank 1.5 miles downstream from Billie Creek, 215 2.5 miles southwest of Minerva, and at mile 1.3.	9.91	1968-73	2-27-73 4-11-73 9-10-73	49.9 *32.3 *5.97

* Base flow.
† Also a crest-stage station.
‡ Operated as a continuous-record gaging station.

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (cfs)
		BLACK ROCK DESERT BASIN (NEVADA)					
10352200	Blue Mountain Creek tributary near McDermitt, Nev.	Lat 42°17'03", long 117°43'06", in SW¼ sec.7, T.38 S., R.43 E., Malheur County, at culvert on BLM access road, 0.1 mile upstream from mouth, 0.5 mile south of Reservoir No. 4, and 22 miles north of McDermitt.	a2.2	1972-73	4-16-73	2.71	0.72
10352300	Jackson Creek tributary near McDermitt, Nev.	Lat 42°14'00", long 117°44'20", in N½ sec.36, T.38 S., R.42 E., Malheur County, at culvert on BLM Star Valley Road 930-0, 15 miles north of McDermitt.	6.61	1969-73	4-16-73	8.80	1.5
10352400	Turner Creek near McDermitt, Nev.	Lat 42°02'18", long 118°06'55", in SW¼ sec.2, T.41 S., R.39 E., Malheur County, at culvert on BLM access road, 20 miles west of McDermitt.	2.04	1972-73	4-16-73	-	19
		SILVER LAKE BASIN					
10390400	Bridge Creek near Thompson Reservoir, Oreg.	Lat 43°01'30", long 121°12'00", in S½ sec.29, T.29 S., R.13 E., Lake County, in Fremont National Forest, at culvert on Forest Service road 2800, 7.2 miles northwest of Thompson Reservoir, and 11 miles southwest of town of Silver Lake.	10.6	1965-73	4-28-73	9.49	41
		MALHEUR AND HARNEY LAKES BASIN					
10392300	Silvies River near Seneca, Oreg.	Lat 44°10'30", long 119°12'50", in NW¼NW¼ sec.23, T.16 S., R.29 E., Grant County, in Malheur National Forest, at culvert on Forest Service road 1611, 100 feet downstream from Wickiup Creek, and 12 miles northwest of Seneca.	18.4	1967-73	3- 1-73	11.73	23
10392800	Crowsfoot Creek near Burns, Oreg.	Lat 43°53'55", long 119°29'50", in NE¼ sec.29, T.19 S., R.27 E., Harney County, in Ochoco National Forest, at culvert on Forest Service road 1939, 1 mile upstream from mouth, and 31 miles northwest of Burns.	8.50	1966-73	4- 9-73	8.67	32
10393900	Devine Canyon near Burns, Oreg.	Lat 43°46'20", long 119°00'05", in NE¼ sec.9, T.21 S., R.31 E., Harney County, at culvert at U.S. Highway 395, at junction with road to Baker Corral, 0.7 mile north of Ochoco National Forest boundary, and 15 miles north of Burns.	4.96	1965-73	3- 1-73	12.33	3.5
10395200	Sage Hen Creek near Burns, Oreg.	Lat 43°31'30", long 119°15'10", in NW¼ sec.4, T.24 S., R.29 E., Harney County, at culvert on U.S. Highway 395, 10.8 miles southwest of Burns.	-	1968-73	3- 1-73	12.32	5.2
10406400	Sunrise Valley tributary near Follyfarm, Oreg.	Lat 43°04'45", long 118°11'15", in SW¼ sec.4, T.29 S., R.37 E., Malheur County, at culvert on State Highway 78, 2.5 miles east of county line, 3 miles north of Follyfarm, and 30.5 miles northwest of Burns Junction.	.78	1973	3- 1-73	3.50	1.0
		GOOSE LAKE BASIN					
11341100	Salt Creek near Lakeview, Oreg.	Lat 42°17'35", long 120°20'45", in NW¼ sec.10, T.38 S., R.20 E., Lake County, at culvert on U.S. Highway 395, 1.7 miles upstream from mouth, 2.6 miles north of Warner Valley Junction, and 7.6 miles north of Lakeview.	5.62	1964-73	4-12-73	14.51	40
11341200	Crane Creek near Lakeview, Oreg.	Lat 42°07'05", long 120°17'25", in NW¼ sec.7, T.40 S., R.21 E., Lake County, in Fremont National Forest, at culvert on Crane Creek road, 1.5 miles east of crossing at U.S. Highway 395, and 6 miles southeast of Lakeview.	11.4	1966-73	4-12-73	12.29	68
		KLAMATH RIVER BASIN					
11491800	Mosquito Creek near Shevlin, Oreg.	Lat 43°05'40", long 121°32'50", in SE¼SE¼ sec.32, T.28 S., R.10 E., Klamath County, in Winema National Forest, at culvert on Forest Service road 283A, 150 ft south of intersection with road 283, 2 miles southwest of Jacks Corral, and 8 miles southeast of Shevlin.	a2.4	1965-73	-	-	b

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		KLAMATH RIVER BASIN--Continued					
11494800	Brownsworth Creek near Bly, Oreg.	Lat 42°25'40", long 120°50'20", in NW¼NW¼ sec.28, T.36 S., R.16 E., Lake County, at culvert on Forest Service road 3610, in Fremont National Forest, 2 miles upstream from Hammond Creek, and about 12 miles east of Bly.	2.20	1965-73	4-12-73	11.28	22
11497800	Currier Creek near Paisley, Oreg.	Lat 42°42'55", long 120°52'50", in NW¼NW¼ sec.18, T.33 S., R.16 E., Lake County, in Fremont National Forest, at culvert on Forest Service road 337, 100 ft east of junction with road 3313, 1.4 miles upstream from mouth, and 17 miles west of Paisley.	2.46	1965-73	4-12-73	12.87	41
11501300	Crystal Creek near Chiloquin, Oreg.	Lat 42°33'45", long 121°50'20", in SE¼ sec.2, T.35 S., R.7 E., Klamath County, in Winema National Forest, at culvert on Chiloquin Ridge road, 200 ft upstream from mouth, and 1.5 miles southeast of Chiloquin.	5.77	1965-73	4-12-73	13.41	20
11504400	Threemile Creek near Crystal, Oreg.	Lat 42°38'20", long 122°05'45", in SE¼ sec.3, T.34 S., R.6 E., Klamath County, in Winema National Forest, at culvert on Forest Service Road 3413A, 1.5 miles upstream from mouth, and 4 miles north of Crystal.	9.47	1965-73	12-23-72	10.71	157
11505550	Lost Creek near Rocky Point, Oreg.	Lat 42°29'35", long 122°11'30", in SE¼ sec.26, T.35 S., R.5 E., Klamath County, in Winema National Forest, at culvert on Forest Service road 3561, 1.5 miles east of Long Lake, and 5.5 miles west of Rocky Point.	13.2	1966-73	12-23-72	9.35	63
11509400	Klamath River tributary near Keno, Oreg.	Lat 42°07'50", long 121°57'50", in SW¼ sec.35, T.39 S., R.7 E., Klamath County, at culvert on State Highway 66, 0.3 mile upstream from mouth, 1.8 miles west of Keno, and 4.0 miles east of Klamath River bridge.	1.02	1964-73	-	-	b
		SNAKE RIVER BASIN					
13172930	Spring Creek tributary near Rockville, Oreg.	Lat 43°13'22", long 117°08'43", in SW¼ sec.7, T.27 S., R.46 E., Malheur County, at culvert on BLM access road, 6 miles west of State line, and 5 miles south of Rockville.	.76	1972-73	1-21-72 12-23-72	11.56 11.37	30 26
		OWYHEE RIVER BASIN					
13177885	Pole Creek tributary near McDermitt, Nev.	Lat 42°09'02", long 117°23'36", in SW¼ sec.25, T.39 S., R.45 E., Malheur County, at culvert on BLM Star Valley Road, 19 miles northeast of McDermitt.	1.0	1971-73	4-16-73	4.22	7.2
13177890	Pole Creek tributary No. 2 near McDermitt, Nev.	Lat 42°09'29", long 117°25'00", in NW¼ sec.26, T.39 S., R.45 E., Malheur County, at culvert on BLM Star Valley Road, 19 miles northeast of McDermitt.	.17	1971-73	4-16-73	4.61	.82
13177895	Antelope Creek tributary near McDermitt, Nev.	Lat 42°15'55", long 117°31'45", in NW¼ sec.23, T.38 S., R.44 E., Malheur County, at culvert on BLM Star Valley road, 21 miles northeast of McDermitt.	3.20	1971-73	4-16-73	9.24	2.8
13177980	Indian Creek near Jordan Valley, Oreg.	Lat 42°39'25", long 117°12'10", in NE¼ sec.28, T.33 S., R.45 E., Malheur County, at culvert on BLM Soldier Creek project road, 24 miles south of Jordan Valley.	3.99	1970-73	12-23-72	9.71	15
13181300	Crooked Creek near Burns Junction, Oreg.	Lat 42°24'09", long 117°51'27", in SW¼ sec.36, T.36 S., R.41 E., Malheur County, at twin culverts on U.S. Highway 95, 0.6 mile south of Basque maintenance yards, and 24.5 miles south of Burns Junction.	46.2	1973	4-12-73	11.43	5.0
13181400	Crooked Creek tributary at Burns Junction, Oreg.	Lat 42°45'48", long 117°51'15", in SW¼ sec.19, T.32 S., R.40 E., Malheur County, at culvert on U.S. Highway 95, 0.95 mile south of Burns Junction, and 13 miles southwest of Rome.	4.83	1973	5-10-73	2.80	4.0
13182100	Dago Gulch near Rockville, Oreg.	Lat 43°17'37", long 117°15'14", in SW¼SE¼ sec.18, T.26 S., R.45 E., Malheur County, at culvert on Bureau of Land Management Leslie Gulch Road, 0.2 mile west of Runaway Creek, and 8 miles west of Rockville.	3.09	1970-73	12-23-72	-	2
13182150	Long Gulch near Rockville, Oreg.	Lat 43°19'17", long 117°11'42", in NW¼NE¼ sec.10, T.26 S., R.45 E., Malheur County, at culvert on Bureau of Land Management Leslie Gulch Road, 1.3 miles upstream from Bannock Gulch, and 4 miles west of Rockville.	.38	1970-73	3- 1-73	9.20	4.1

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		MALHEUR RIVER BASIN					
13213900	Malheur River tributary near Drewsey, Oreg.	Lat 43°46'56", long 118°21'30", in S½ sec.36, T.20 S., R.35 E., Harney County, at culvert on county road to Drewsey, 200 feet north of U.S. Highway 20, and 2 miles south of Drewsey.	2.29	1964-73	12-23-72	9.57	43
13219300	Malheur River tributary near Harper, Oreg.	Lat 43°48'51", long 117°39'13", in SE¼ sec.23, T.20 S., R.41 E., Malheur County, at culvert on U.S. Highway 20, 4 miles southwest of Harper.	.10	1968-73	12-23-72	10.25	44
13228300	Lytle Creek near Vale, Oreg.	Lat 43°57'26", long 117°13'33", in SE¼ sec.32, T.18 S., R.45 E., Malheur County, at culvert on Lytle Boulevard, 2 miles south of Vale.	6.46	1968-73	12-23-72	9.96	100
13229400	Lost Valley Creek tributary near Ironside, Oreg.	Lat 44°18'50", long 117°54'10", in SW¼ sec.26, T.14 S., R.39 E., Malheur County, at culvert on U.S. Highway 26, 2.2 miles east of Ironside.	1.86	1966-73	3- 1-73	7.92	25
13231700	Canyon Creek tributary near Brogan, Oreg.	Lat 44°15'50", long 117°37'15", in NW¼ sec.18, T.15 S., R.42 E., Malheur County, at culvert on U.S. Highway 26, 0.3 mile upstream from mouth, and 5.8 miles west of Brogan.	1.24	1967-73	3- 1-73	11.30	26
		MOORES HOLLOW BASIN					
13269200	Moores Hollow tributary near Weiser, Idaho	Lat 44°07'30", long 117°10'10", in SE¼SE¼ sec.18, T.16 S., R.46 E., Malheur County, at culvert on Interstate Highway 80N, 7.0 miles southeast of junction with U.S. Highway 30, and 8.0 miles southwest of Weiser.	.90	1966-73	-	-	(†)
		BURNT RIVER BASIN					
13272300	Job Creek tributary near Unity, Oreg.	Lat 44°27'50", long 118°12'00", in S½ sec.5, T.13 S., R.37 E., Baker County, on State Highway 7, 100 feet north of U.S. Highway 26 junction, and 2 miles north of Unity.	-	1966-73	12-23-72	11.81	7.8
13274600	Burnt River tributary at Durkee, Oreg.	Lat 44°34'30", long 117°26'45", in SE¼ sec.28, T.11 S., R.43 E., Baker County, at culvert on Interstate Highway 80N, 0.6 mile upstream from mouth, and 0.8 mile southeast of Durkee.	1.80	1966-73	8- 2-73	6.32	4.6
		POWDER RIVER BASIN					
13286300	Waterspout Creek near Baker, Oreg.	Lat 44°50'10", long 117°33'45", in SE¼ sec.28, T.8 S., R.42 E., Baker County, at culvert on State Highway 86, 14 miles east of Baker.	.96	1968-73	1-15-73	12.73	10
13289100	Immigrant Gulch near Richland, Oreg.	Lat 44°47'10", long 117°08'05", in NW¼ sec.18, T.9 S., R.46 E., Baker County, at culvert on State Highway 86, 1.9 miles northeast of Richland, and 2.0 miles above maximum flow line of Brownlee Reservoir.	6.64	1964-73	2-28-73	6.03	3
		PINE CREEK BASIN					
13290150	North Pine Creek near Homestead, Oreg.	Lat 45°05'25", long 116°53'45", in NW¼ sec.31, T.5 S., R.48 E., Baker County, at culvert on Forest Service road S51, 300 ft upstream from Doe Creek, and 5 miles northwest of Homestead.	2.89	1965-73	12-23-72	10.22	53
		IMNAHA RIVER BASIN					
13291200	Mahogany Creek near Homestead, Oreg.	Lat 45°12'15", long 116°52'05", in NE¼ sec.19, T.4 S., R.48 E., Wallowa County, in Wallowa-Whitman National Forest, at culvert on Forest Service road S115, 500 feet upstream from mouth, and 12 miles north of Homestead.	4.00	1965-73	12-23-72	10.55	55
13291400	Deer Creek near Imnaha, Oreg.	Lat 45°33'00", long 116°47'30", in SW¼ sec.23, T.1 N., R.48 E., Wallowa County, in Wallowa-Whitman National Forest, at culvert on Forest Service road N206, 2 miles southeast of Imnaha.	1.73	1965-73	-	-	(b)
		GRANDE RONDE RIVER BASIN					
13318100	McIntyre Creek near Starkey, Oreg.	Lat 45°19'40", long 118°26'55", in SE¼SE¼ sec.5, T.3 S., R.35 E., Union County, in Wallowa-Whitman National Forest, at culvert on Forest Service road S217, 1.8 miles south of Union County line, and 7 miles north of Starkey.	1.80	1966-73	3- 1-73	13.14	26

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
GRANDE RONDE RIVER BASIN--Continued							
13320400	Little Creek at High Valley, near Union, Oreg.	Lat 45°12'45", long 117°46'30", in SW¼SE¼ sec.14, T.4 S., R.40 E., Union County, at county road bridge, 4 miles east of Union.	15.8	1948, 1952-73	5- 7-73	10.18	48
13321300	Ladd Canyon near Hot Lake, Oreg.	Lat 45°11'36", long 118°00'48", on sec. lines 23 and 24, T.4 S., R.38 E., Union County, at culvert on U.S. Highway 30, 4 miles southwest of Hot Lake, and 9 miles southeast of La Grande.	15.5	1953, 1958-73	-	-	(†)
13322300	Dry Creek near Bingham Springs,	Lat 45°38'10", long 118°06'55", in NE¼SE¼ sec.24, T.2 N., R.37 E., Umatilla County, in Umatilla National Forest, at culvert on Forest Service road N32 (Ruckel Road), at Umatilla County line, 9 miles southeast of Bingham Springs.	1.37	1956-73	4- 9-73	29.64	32
13324150	Rysdam Canyon tributary near Minam, Oreg.	Lat 45°36'55", long 117°47'45", in NE¼ sec.34, T.2 N., R.40 E., Union County, at culvert on county road, 0.2 mile upstream from mouth, 3.5 miles west of Minam.	.99	1967-73	1-17-73	22.77	7.2
13329700	Trout Creek tributary near Chico, Oreg.	Lat 45°35'50", long 117°15'35", in center of sec.1, T.1 N., R.44 E., Wallowa County at culvert on State Highway 3, 0.2 mile upstream from mouth, 1.0 mile south of Wallowa-Whitman National Forest boundary and 9.5 miles southwest of Chico.	.26	1967-73	3-21-73	9.03	4.1
13329750	Trout Creek tributary near Enterprise, Oreg.	Lat 45°26'20", long 117°17'00", in NW¼ sec.35, T,1 S., R.44 E., Wallowa County, at culvert on State Highway 3, 0.9 mile north of junction with State Highway 82 in Enterprise.	4.38	1967-73	1-17-73	17.20	38
13333050	Buford Creek near Flora, Oreg.	Lat 45°53'25", long 117°17'00", on sec. line 23 and 26, T.5 N., R.44 E., Wallowa County, at two culverts on county road, 1.0 mile west of junction with State Highway 3, 1.5 miles southeast of Flora.	.40	1967-73	12-18-72	8.19	6.3
13333100	Doe Creek near Imnaha, Oreg.	Lat 45°44'50", long 117°01'20", in NE¼ sec.14, T.3 N., R.46 E., Wallowa County, in Wallowa-Whitman National Forest, at culvert on Forest Service road N431, 0.1 mile north of Vigne Forest Camp, and 16 miles northwest of Imnaha.	*5.49	1965-73	1-17-73	5.07	4.3
WALLA WALLA RIVER BASIN							
14016080	Dry Creek tributary near Milton-Freewater, Oreg.	Lat 45°53'05", long 118°23'28", in NE¼ sec.26, T.5 N., R.35 E., Umatilla County, at culvert on State Highway 11, 2.6 miles south of Milton-Freewater.	1.22	1967-73	1-17-73	18.77	23
COLD SPRINGS CANYON BASIN							
14019120	North Fork Cold Springs Canyon tributary at Holdman, Oreg.	Lat 45°52'40", long 118°55'10", in N½ sec.34, T.5 N., R.31 E., Umatilla County, at culvert on county road, at mouth, and 0.6 mile east of Holdman.	2.86	1967-73	12-20-72	21.48	40
UMATILLA RIVER BASIN							
14019400	Elbow Creek near Bingham Springs, Oreg.	Lat 45°42'45", long 118°11'54", in NE¼ sec.28, T.3 N., R.37 E., Umatilla County, in Umatilla National Forest, at culvert on Forest Service road N32, 200 ft upstream from mouth, and 2.6 miles southeast of Bingham Springs.	.68	1965-73	4- 9-73	12.57	(†)
14020800	Mission Creek at St. Andrews Mission, Oreg.	Lat 45°38'05", long 118°37'18", in SE¼ sec.24, T.2 N., R.33 E., Umatilla County, at culvert on county road, 0.1 mile east of St. Andrews School, and 8 miles east of Pendleton.	4.45	1958, 1963-73	2-16-73	14.08	3.3
14021600	Nelson Creek at Pendleton, Oreg.	Lat 45°40'56", long 118°48'24", on line between sec.3 and 4, T.2 N., R.32 E., Umatilla County, at culvert on U.S. Highway 395, 0.7 mile upstream from mouth, and 0.5 mile northwest of Pendleton.	2.56	1958-73	-	-	0
14032100	Butter Creek tributary near Pine City, Oreg.	Lat 45°38'30", long 119°24'50", in NW¼ sec.23, T.2 N., R.27 E., Umatilla County, at culvert on State Highway 19, 0.1 mile upstream from mouth, 1.8 miles north of county line, and 4.2 miles north of Pine City.	1.50	1948, 1963-73	1-17-73	8.36	17

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		JUNIPER CANYON BASIN					
14034240	Little Juniper Canyon near Pine City Oreg.	Lat 45°33'32", long 119°36'00", in NE¼NW¼ sec.19, T.1 N., R.26 E., Morrow County, at culvert on county road, 8.0 miles west of Pine City.	4.87	1968-73	-	-	(b)
		WILLOW CREEK BASIN					
14034370	Willow Creek tributary near Heppner, Oreg.	Lat 45°13'40", long 119°20'00", in SW¼ sec.9, T.4 S., R.28 E., Morrow County, at culvert on Willow Creek Road, 300 ft above mouth, and 16.1 miles southeast of Heppner.	-	1958-73	4- 9-73	11.31	2.0
14034830	Cason Creek at Ruggs, Oreg.	Lat 45°15'50", long 119°41'05", in SW¼NE¼ sec.34, T.3 S., R.25 E., Morrow County, at culvert on Rhea Creek road, at junction with State Highway 207, at Ruggs.	2.21	1968-73	-	-	0
		JOHN DAY RIVER BASIN					
14036800	John Day River near Prairie City, Oreg.	Lat 44°19'10", long 118°33'25", in SE¼SW¼ sec.30, T.14 S., R.35 E., Grant County at culvert on Forest Service road 1427, in Malheur National Forest, 200 ft downstream from Call Creek, and 12 miles southeast of Prairie City.	17.4	1965-73	5-15-73	7.88	48
14038550	East Fork Canyon Creek near Canyon City, Oreg.	Lat 44°14'45", long 118°54'40", in NE¼ sec.30, T.15 S., R.32 E., Grant County, in Malheur National Forest, at culvert on Forest Service road 1451, at mouth, and 10 miles south of Canyon City.	24.8	1965-73	5-16-73	10.76	67
14038600	Vance Creek near Canyon City, Oreg.	Lat 44°17'20", long 118°58'50", in NE¼ sec.10, T.15 S., R.31 E., Grant County, at culvert on U.S. Highway 395, at confluence with South Fork, 1.0 mile upstream from mouth, and 9.5 miles south of Canyon City.	6.54	1964-73	5-16-73	11.92	16
14038750	Beech Creek near Fox, Oreg.	Lat 44°34'05", long 119°06'30", in SE¼ sec.33, T.11 S., R.30 E., Grant County, at culvert on U.S. Highway 395, at entrance to Beech Creek Forest Camp, and 6.8 miles south of Fox.	1.94	1965-73	5-16-73	12.49	20
14038900	Fields Creek near Mount Vernon, Oreg.	Lat 44°23'35", long 119°18'25", in SE¼ sec.35, T.13 S., R.28 E., Grant County, in Malheur National Forest, at culvert on Forest Service road 1451, 0.3 mile upstream from Big Canyon and 10 miles west of Mt. Vernon.	17.5	1965-73	6-20-73	8.64	16
14039200	Venator Creek near Silvies, Oreg.	Lat 43°59'55", long 119°16'30", in NW¼ sec.20, T.18 S., R.29 E., Grant County, in Malheur National Forest, at culvert on Forest Service road 1877, 1.5 miles above mouth, and 16 miles west of Silvies.	11.9	1966-73	5-15-73	11.94	76
14039400	Jackass Creek near Dayville, Oreg.	Lat 44°21'10", long 119°33'10", in SW¼ sec.13, T.14 S., R.25 E., Grant County, at culvert on BLM road (project no. 205), at mouth, 10.4 road miles south of Dayville.	3.95	1969-73	1-15-73	8.42	12
14040700	Whisky Creek near Mitchell, Oreg.	Lat 44°31'21", long 119°55'18", in SE¼ sec.14, T.12 S., R.23 E., Wheeler County, at culvert on U.S. Highway 26, 13.6 miles east of Mitchell.	2.22	1968-73	12-21-72	10.45	32
14040900	Bruin Creek near Dale, Oreg.	Lat 44°53'51", long 118°47'35", in SW¼ sec.6, T.8 S., R.33 E., Grant County, at culvert on Forest Service road SA-12, 12 miles southeast of Dale.	4.63	1969-73	4-25-73	10.96	2.0
14041900	Line Creek near Lehman Springs, Oreg.	Lat 45°10'10", long 118°42'40", in NW¼ sec.3, T.5 S., R.33 E., Umatilla County, in Umatilla National Forest, at culvert on Forest Service road 524, 0.2 mile upstream from mouth, and 2 miles west of Lehman Springs.	2.40	1965-73	1-15-73	10.90	12
14043800	Bridge Creek near Prairie City, Oreg.	Lat 44°32'30", long 118°32'25", in NE¼ sec.7, T.12 S., R.35 E., Grant County, at culvert at intersection of Looney Springs Road and U.S. Highway 26, 3.1 miles east of Dixie Summit, and 13.4 miles east of Prairie City.	6.93	1964-73	4-25-73	7.76	21
14043850	Cottonwood Creek near Galena, Oreg.	Lat 44°39'10", long 118°51'55", in SE¼ sec.33, T.10 S., R.32 E., Grant County, in Malheur National Forest, at culvert on Forest Service road 1015, 2.5 miles upstream from mouth, and 4 miles south of Galena.	3.89	1965-73	4-25-73	10.29	24

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
		JOHN DAY RIVER BASIN--Continued					
14043900	Granite Creek near Dale, Oreg.	Lat 44°53'40", long 119°00'50", in NW¼ sec.8, T.8 S., R.31 E., Grant County, at culvert on U.S. Highway 395, 4.7 miles north of bridge on Middle Fork John Day River, and 8.2 miles south of Dale.	1.90	1965-73	5-17-73	13.11	2.8
14044100	Paul Creek near Long Creek, Oreg.	Lat 44°43'26", long 119°07'54", in SE¼ sec.5, T.10 S., R.30 E., Grant County, at culvert on State Highway 207, 1.5 miles east of Long Creek.	3.50	1968-73	2-20-73	8.13	4.1
14045100	East Fork Cottonwood Creek near Hamilton, Oreg.	Lat 44°45'25", long 119°21'21", in SE¼ sec.28, T.9 S., R.28 E., Grant County, at culvert on State Highway 207, 2.7 miles northwest of Hamilton.	.78	1968-73	5-15-73	-	4,140
14046250	Ives Canyon near Spray, Oreg.	Lat 44°51'35", long 119°42'50", in SE¼NE¼ sec.22, T.8 S., R.25 E., Wheeler County, at culvert on State Highway 207, 4 miles south of National Forest boundary, and 4 miles northeast of Spray.	2.73	1967-73	2-21-73	11.08	2.9
14046300	Big Service Creek near Service Creek, Oreg.	Lat 44°53'38", long 120°04'11", in NE¼NE¼ sec.10, T.8 S., R.22 E., Wheeler County, at culvert on State Highway 19, 7.8 miles north of Service Creek.	5.56	1968-73	6-20-73	6.85	2.8
14046400	Donnely Creek tributary near Service Creek, Oreg.	Lat 44°46'20", long 120°00'10", in SE¼ sec.19, T.9 S., R.23 E., Wheeler County, at two culverts on State Highway 207, 1.8 miles south of Service Creek.	1.85	1964-73	10-20-72	9.60	5.0
14046650	Carrol Creek near Mitchell, Oreg.	Lat 44°33'07", long 120°20'25", in SW¼ sec.4, T.12 S., R.20 E., Wheeler County, at culvert on U.S. Highway 26, 11.5 miles west of Mitchell.	.20	1968-73	-	-	0
14046900	John Day River tributary near Clarno, Oreg.	Lat 44°54'20", long 120°34'05", in NE¼ sec.4, T.8 S., R.18 E., Wasco County, at culvert on State Highway 218, 5 miles west of Clarno, and 8 miles east of Antelope.	1.36	1969-73	-	-	(b)
14047350	Rock Creek tributary near Hardman, Oreg.	Lat 45°04'40", long 119°34'10", in NE¼ sec.2, T.6 S., R.26 E., Morrow County, in Umatilla National Forest, at culvert on Forest Service road 618, 0.5 mile upstream from mouth, and 8.5 miles southeast of Hardman.	6.25	1965-73	12-20-72	12.45	55
14047450	West Fork Dry Creek near Gooseberry, Oreg.	Lat 45°17'12", long 119°57'53", in SE¼SE¼ sec.20, T.3 S., R.23 E., Morrow County, at culvert on State Highway 206, 3.5 miles west of Gooseberry, and 10 miles northeast of Condon.	*.81	1965-73	-	-	(b)
14047470	Juniper Canyon tributary near Mikkalo, Oreg.	Lat 45°27'51", long 120°11'54", in SW¼ sec.21, T.1 S., R.21 E., Gilliam County, at culvert on Mikkalo Road, 0.1 mile upstream from mouth, and 1.7 miles east of Mikkalo.	1.94	1972-73	5-15-73	6.30	4.0
14048020	Grass Valley Canyon near Grass Valley, Oreg.	Lat 45°22'25", long 120°46'27", on sec. lines 23 and 26, T.2 S., R.16 E., Sherman County, at culvert on county road, 1 mile northeast of Grass Valley.	8.15	1958-73	12-23-72	-	64
14048040	Gordon Hollow at DeMoss Springs, Oreg.	Lat 45°30'40", long 120°40'55", in NW¼ sec.3, T.1 S., R.17 E., Sherman County, at culvert on U.S. Highway 97 at DeMoss Springs.	8.86	1959-73	12-20-72	9.96	210
		SPANISH HOLLOW BASIN					
14048300	Spanish Hollow at Wasco, Oreg.	Lat 45°35'20", long 120°41'40", in NE¼ sec.9, T.1 N., R.17 E., Sherman County, at culvert on street in southeast Wasco, 1 block east of U.S. Highway 97.	8.05	1959-73	12-21-72	5.94	213
14048310	Spanish Hollow tributary at Wasco, Oreg.	Lat 45°35'30", long 120°42'55", on sec. lines 5 and 8, T.1 N., R.17 E., Sherman County, on State Highway 206, 0.9 mile west of junction of Highway 97 in Wasco.	6.13	1967-73	12-21-72	-	85
		DESCHUTES RIVER BASIN					
14077800	Wolf Creek tributary near Paulina, Oreg.	Lat 44°16'39", long 119°49'00", in NW¼NW¼ sec.14, T.15 S., R.24 E., Crook County, in Ochoco National Forest, at culvert on Forest Service road 1438, 1.7 miles south of Crook County line, 13 miles northeast of Paulina.	2.15	1965-73	4- 9-73	8.66	52

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		DESCHUTES RIVER BASIN--Continued					
14078200	Lizard Creek tributary near Hampton, Oreg.	Lat 43°35'20", long 119°59'00", in SW¼ sec.8, T.23 S., R.23 E., Lake County, in Glass Mountain conservation area, at culvert on U.S. Highway 20, and 15.5 miles east of Hampton.	19.6	1965-73	-	-	(b)
14078280	Middle Fork Camp Creek near Paulina, Oreg.	Lat 43°57'24", long 120°15'30", in NW¼ sec.6, T.19 S., R.21 E., Crook County, at two culverts on Camp Creek road, 0.2 mile upstream from mouth, and 20 miles southwest of Paulina.	18.3	1972-73	12-20-72	8.26	24
14078300	Cemetery Creek near Paulina, Oreg.	Lat 44°06'36", long 120°10'39", in SW¼ sec.11, T.17 S., R.21 E., Crook County, at culvert on State Highway 380, 13.2 miles west of Paulina.	5.10	1968-73	-	-	0
14078400	Lookout Creek near Post, Oreg.	Lat 44°18'40", long 120°14'24", in SW¼ sec.32, T.14 S., R.21 E., Crook County, in Ochoco National Forest, at culvert on Forest Service Road 143, and 16 miles northeast of Post.	7.53	1966-73	12-21-72	7.05	24
14079750	Crooked River tributary near Post, Oreg.	Lat 44°10'42", long 120°34'06", in SE¼ sec.16, T.16 S., R.18 E., Crook County, at culvert on county road, 5.4 miles west of Post.	.30	1968-73	-	-	0
14080100	Bear Creek tributary near Brothers, Oreg.	Lat 43°56'17", long 120°34'51", in SE¼NE¼ sec.8, T.19 S., R.18 E., Crook County, at culvert on BLM Bear Creek road, 9 miles north of Brothers.	.86	1972-73	-	-	0
14080150	Bear Creek tributary No. 2 near Brothers, Oreg.	Lat 43°57'00", long 120°39'02", in NE¼SE¼ sec.2, T.19 S., R.17 E., Crook County, at culvert on Bear Creek road, 0.2 mile upstream from mouth and 12 miles north of Brothers.	2.50	1972-73	5- 3-73	7.36	6.6
14080180	Sage Hollow tributary near Millican, Oreg.	Lat 43°58'41", long 120°43'07", in NE¼SW¼ sec.29, T.18 S., R.17 E., Crook County, at culvert on State Highway 27, 1.0 mile upstream from Bear Creek, and 12 miles northeast of Millican.	3.50	1972-73	-	-	(b)
14080300	Bear Creek tributary near Millican, Oreg.	Lat 44°03'40", long 120°44'20", near sec. lines 30 and 31, T.17 S., R.17 E., Crook County at culvert on State Highway 27, 15 miles northeast of Millican.	6.59	1969-73	-	-	(b)
14080600	Dry Creek near Prineville, Oreg.	Lat 44°12'12", long 120°45'36", in NW¼ sec.12, T.16 S., R.16 E., Crook County, at culvert on Juniper Canyon road, 8 miles southeast of Prineville.	14.5	1968-73	-	-	(b)
14081800	Ahalt Creek near Mitchell, Oreg.	Lat 44°26'00", long 120°21'05", in NE¼ sec.20, T.13 S., R.20 E., Crook County, at culvert on Forest Service road 1222, 200 ft upstream from mouth.	2.28	1956-73	12-20-72	7.73	38
14082400	Wildcat Creek near Prineville, Oreg.	Lat 44°24'47", long 120°30'00", in NW¼ sec.30, T.13 S., R.19 E., Crook County, at culvert on U.S. Highway 26, 18.5 miles northeast of Prineville.	3.66	1968-73	3-22-73	9.10	.3
14084400	Ochoco Reservoir tributary near Prineville, Oreg.	Lat 44°18'09", long 120°43'00", in NW¼ sec.5, T.15 S., R.17 E., Crook County, at culvert on U.S. Highway 26, 6 miles east of Prineville.	.63	1968-73	-	-	(b)
14087100	Lone Pine Creek tributary near Prineville, Oreg.	Lat 44°24'56", long 121°00'16", in NW¼NW¼ sec.25, T.13 S., R.14 E., Jefferson County at culvert on U.S. Highway 26, 11.3 miles northwest of Prineville.	1.02	1968-73	-	-	(b)
14092300	Willow Creek tributary near Culver, Oreg.	Lat 44°30'38", long 121°04'15", in SE¼ sec.20, T.12 S., R.14 E., Jefferson County, in Crooked River National Grasslands, at culvert on U.S. Highway 26, 0.4 mile upstream from mouth, and 7 miles east of Culver	7.47	1965-73	-	-	(b)
14093700	Woods Hollow at Ashwood, Oreg.	Lat 44°44'10", long 120°45'10", in SW¼ sec.36, T.9 S., R.16 E., Jefferson County, at culvert on county road, 0.1 mile upstream from mouth, and 0.3 mile north of Ashwood.	1.42	1959-73	-	-	(b)
14094300	Cow Canyon Creek near Antelope, Oreg.	Lat 44°50'35", long 120°55'40", in NW¼SW¼ sec.27, T.8 S., R.15 E., Jefferson County, at culvert on U.S. Highway 97, 2.6 miles north of Willowdale, and 11 miles southwest of Antelope.	2.71	1959-73	-	-	(b)
14095200	Sagebrush Creek tributary near Gateway, Oreg.	Lat 44°45'33", long 121°02'02", in SE¼NE¼ sec.27, T.9 S., R.14 E., Jefferson County, at culvert on former U.S. Highway 97, 1 mile upstream from mouth and 11 miles north of Madras.	a7.4	1957-73	6- 6-73	10.36	1.4

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		DESCHUTES RIVER BASIN--Continued					
14100800	Jordan Creek near Tygh Valley, Oreg.	Lat 45°20'27", long 121°20'45", in SW¼NE¼ sec.6, T.3 S., R.12 E., Wasco County, in Mt. Hood National Forest, at culvert on Forest Service road S207, 10.5 miles northwest of Tygh Valley.	9.01	1965-73	12-20-72	12.55	91
14102300	Box Elder Canyon near Grass Valley, Oreg.	Lat 45°21'37", long 120°54'10", in SW¼ sec.26, T.2 S., R.15 E., Sherman County, at culvert on BLM Deschutes River access road, at mouth, and 6 miles west of Grass Valley.	2.21	1972-73	1-29-73	9.41	6.8
		FIFTEENMILE CREEK BASIN					
14104100	Ramsey Creek near Dufur, Oreg.	Lat 45°24'03", long 121°22'27", in NW¼ sec.13, T.2 S., R.11 E., Wasco County, in Mt. Hood National Forest, at culvert on Forest Service road S207, 12 miles west of Dufur.	3.87	1965-73	12-20-72	10.87	31
		WILLAMETTE RIVER BASIN					
14144870	Middle Fork Willamette River tributary near Oakridge, Oreg.	Lat 43°40'20", long 122°26'00", in SW¼ sec.10, T.22 S., R.3 E., Lane County, at culvert on Rigdon Road, 400 ft upstream from flow line of Hills Creek Reservoir, and 5.0 miles south of Oakridge.	.50	1960-73	12-19-72	15.10	13
14145690	Swamp Creek near McCredie Springs, Oreg.	Lat 43°39'40", long 122°12'45", in SE¼ sec.16, T.22 S., R.5 E., Lane County, in Willamette National Forest, at culvert on Forest Service road 2156, 0.7 mile upstream from mouth, and 6 miles southeast of McCredie Springs.	1.51	1965-73	5- 2-73	7.40	2
14147400	Tumble Creek near Westfir, Oreg.	Lat 43°52'50", long 122°22'30", in N½NW¼ sec.31, T.19 S., R.4 E., Lane County, in Willamette National Forest, at culvert on Forest Service road 196, at mouth, and 10.5 miles northeast of Westfir.	1.52	1965-73	12-21-72	7.98	16
14148700	Fern Creek near Lowell, Oreg.	Lat 43°51'50", long 122°41'05", in W½NW¼ sec.3, T.20 S., R.1 E., Lane County, at culvert on State Highway 58, at mouth, and 6 miles southeast of Lowell.	.44	1953-73	12-22-72	5.03	12
14158950	Twisty Creek near Belknap Springs, Oreg.	Lat 44°13'30", long 122°02'35", in NE¼ sec.35, (unsurveyed), T.15 S., R.6 E., Lane County, in Willamette National Forest, at culvert on Forest Service road 1558, 0.8 mile upstream from mouth, and 2.5 miles north of Belknap springs.	1.18	1965-73	12-19-72	20.08	29
14169700	Bear Creek near Cheshire, Oreg.	Lat 44°09'30", long 123°21'10", in SE¼ sec.24, T.16 S., R.6 W., Lane County, at culvert on State Highway 36 and 4.2 miles southwest of Cheshire.	5.19	1956-73	12-22-72	18.27	145
14178600	Short Creek at Breitenbush Hot Springs, Oreg.	Lat 44°47'10", long 121°58'55", in S½SW¼ sec.17, T.9 S., R.7 E., Marion County, in Willamette River National Forest, at culvert on Forest Service road S906, 0.5 mile above mouth and 0.5 mile northwest of Breitenbush Hot Springs.	2.00	1965-73	12-21-72	7.42	82
14178800	Wind Creek near Detroit, Oreg.	Lat 44°45'20", long 122°07'10", in NE¼ sec.31, T.9 S., R.6 E., Marion County, at culvert on Breitenbush River road, 0.1 mile upstream from mouth, and 2 miles northeast of Detroit.	1.03	1954-73	1-17-73	9.80	55
14184900	Sheek Creek near Cascadia, Oreg.	Lat 44°23'25", long 122°30'25", in SW¼SE¼ sec.36, T.13 S., R.2 E., Linn County, at culvert on U.S. Highway 20 at Cascadia ranger station, 0.1 mile upstream from mouth, and 1.5 miles west of Cascadia.	.89	1953-73	1- 9-73	11.42	5.0
14190600	Soap Creek tributary near Suver, Oreg.	Lat 44°42'00", long 123°13'10", in SW¼NE¼ sec.18, T.10 S., R.4 E., Benton County, at culvert on U.S. Highway 99W, 1.2 miles south of Polk County line and 3 miles south of Suver.	.57	1953-73	12-18-72	3.04	26
14192100	Glenn Creek near Salem, Oreg.	Lat 44°57'05", long 123°05'00", in SE¼NW¼ sec.20, T.7 S., R.3 W., Polk County, at culvert on Glenn Creek road, 1.5 miles northwest of Salem.	2.72	1952-73	12-18-72	16.44	42
14197800	South Yamhill River tributary near Willamina, Oreg.	Lat 45°02'38", long 123°28'20", in SW¼ sec.18, T.6 S., R.6 W., Polk County, at culvert on State Highway 22, 2.2 miles upstream from mouth, and 3 miles southeast of Willamina.	1.81	1954-73	12-18-72	9.80	105
14204100	Bateman Creek near Glenwood, Oreg.	Lat 45°37'30", long 123°15'40", in SW¼ sec.26, T.2 N., R.5 W., Washington County, at culvert on State Highway 6, at mouth, 1.5 miles south of Glenwood.	1.27	1952-73	12-21-72	11.85	62

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
WILLAMETTE RIVER BASIN--Continued							
14207920	Poop Creek near Big Bottom, Oreg.	Lat 44°58'35", long 121°50'35", in SW¼ sec.9 (unsurveyed), T.7 S., R.8 E., Clackamas County, in Mt. Hood National Forest, at culvert on Forest Service road S650, at mouth, and 3 miles southeast of Big Bottom.	1.74	1966-73	1-15-73	11.70	9.2
14208200	Collawash River tributary near Breitenbush Hot Springs, Oreg.	Lat 44°55'50", long 122°00'40", in NE¼SE¼ sec.25, T.7 S., R.6 E., Marion County, at culvert on Forest Service road S63, 0.5 mile north of Russ Creek, and 10 miles north of Breitenbush Hot Springs.	.39	1966-73	5-12-73	27.50	28
14208850	East Fork Shellrock Creek near Government Camp, Oreg.	Lat 45°08'30", long 121°53'55", in NW¼ sec.13, T.5 S., R.7 E., Clackamas County, in Mt. Hood National Forest, at culvert on Forest Service road 58B, 5 miles west of Timothy Lake, and 13.5 miles southwest of Government Camp.	2.30	1965-73	12-21-72	11.10	44
14209100	Kink Creek near Government Camp,	Lat 45°04'15", long 121°57'45", in SW¼ sec.4, T.6 S., R.7 E., Clackamas County, at culvert 0.1 mile downstream from Kelly Creek, 0.2 mile upstream from mouth at Lake Harriet on the Oak Grove Fork Clackamas River, and 19 miles southwest of Government Camp.	3.75	1957-73	12-21-72	15.59	26
14209750	Whisky Creek near Estacada, Oreg.	Lat 45°12'50", long 122°09'30", in E½NW¼ sec.23, T.4 S., R.5 E., Clackamas County, in Mt. Hood National Forest, at culvert on Forest Service road S457, 0.1 mile upstream from mouth, and 10 miles southeast of Estacada.	1.06	1965-73	12-21-72	13.52	48
14209900	DuBois Creek at Estacada, Oreg.	Lat 45°16'55", long 122°20'35", in NW¼ sec.29, T.3 S., R.4 E., Clackamas County, at culvert 0.4 mile upstream from mouth, and 0.5 mile southwest of Estacada.	2.52	1957-73	12-20-72	17.16	67
14211800	Saltzman Creek at Portland, Oreg.	Lat 45°33'55", long 122°44'40", in SE¼SE¼ sec.13, T.1 N., R.1 W., Multnomah County, at culvert at intersection of N.W. Balboa and Culebra Streets in Portland, 430 feet downstream from U.S. Highway 30, and 0.3 mile upstream from mouth.	1.46	1952-73	12-22-72	12.52	145
MERRILL CREEK BASIN							
14222905	Merrill Creek at Deer Island, Oreg.	Lat 45°55'59", long 122°51'14", in NW¼ sec.13, T.7 N., R.1 W., Columbia County, at culvert on Canaan Road, 0.6 mile west of town of Deer Island.	7.53	1972-73	12-21-72	9.26	330
CLATSKANIE RIVER BASIN							
14247020	Fall Creek near Clatskanie, Oreg.	Lat 46°05'47", long 123°14'56", in NW¼ sec.13, T.7 N., R.5 W., Columbia County, at culvert on private road, 100 feet south of State Highway 47, 2.5 miles west of Clatskanie.	2.07	1972-73	12-21-72	10.65	99
BIG CREEK BASIN							
14248510	Little Creek near Knappa, Oreg.	Lat 46°08'44", long 123°36'16", in SW¼ sec.30, T.8 N., R.7 W., Clatsop County, at culvert on Hillcrest Road, 3 miles south of Knappa.	1.53	1972-73	12-21-72	11.12	72
ASBURY CREEK BASIN							
14299500	Asbury Creek near Cannon Beach, Oreg.	Lat 45°48'55", long 123°57'50", in SW¼ sec.19, T.4 N., R.10 W., Clatsop County, at culvert on U.S. Highway 101, at Arch Cape, 0.1 mile upstream from mouth and 6 miles south of Cannon Beach.	1.97	1952-73	12-20-72	8.92	255
NEHALEM RIVER BASIN							
14300400	Fishhawk Creek near Jewel, Oreg.	Lat 45°58'45", long 123°36'10", in NW¼NW¼ sec.30, T.6 N., R.7 W., Clatsop County, at two culverts on State Highway 202, 6.5 miles northwest of Jewel.	.71	1971-73	12-21-72	18.58	80

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
LITTLE NESTUCCA RIVER BASIN							
14303650	Squaw Creek near Neskowin, Oreg.	Lat 45°06'56", long 123°53'41", in NW¼ sec.27, T.5 S., R.10 W., Tillamook County, in Siuslaw National Forest, at culvert on Forest Service road S533, 1 mile upstream from mouth, and 4 miles east of Neskowin.	2.11	1965-73	12-18-72	15.68	264
SALMON RIVER BASIN							
14303700	Alder Brook near Rose Lodge, Oreg.	Lat 45°01'20", long 123°51'10", in SE¼ sec.25, T.6 S., R.10 W., Lincoln County, at culvert on State Highway 18, 0.1 mile upstream from mouth, and 1.5 miles northeast of Rose Lodge.	1.09	1954-73	12-17-72	12.37	113
ALSEA RIVER BASIN							
14306830	Lyndon Creek near Waldport, Oreg.	Lat 44°27'02", long 123°58'50", in SE¼ sec.11, T.13 S., R.11 W., Lincoln County, in Siuslaw National Forest, at culvert on Forest Service road 1245, 0.9 mile upstream from mouth, and 4 miles northeast of Waldport.	.90	1965-73	12-18-72	5.88	23
MILL CREEK BASIN							
14306880	Mill Creek near Yachats, Oreg.	Lat 44°13'15", long 124°06'30", in NE¼ sec.34, T.15 S., R.12 W., Lane County, in Siuslaw National Forest, at culvert on Forest Service road 1571, 0.2 mile upstream from mouth, and 7 miles south of Yachats.	1.65	1966-73	12-21-72	9.72	84
SIUSLAW RIVER BASIN							
14306920	Siuslaw River near Lorane, Oreg.	Lat 43°51'05", long 123°22'10", in NE¼ sec.11, T.20 S., R.6 W., Lane County, on left bank ½ mile below Siuslaw Falls, 0.4 mile downstream from Russell Creek, 7 miles northwest of Lorane, and at mile 99.3	81.8	1968-73	12-22-72	6.40	740
14306940	Siuslaw River at Alma, Oreg.	Lat 43°52'55", long 123°29'30", in NE¼ sec.35, T.19 S., R.7 W., Lane County, on right and left banks 0.8 mile above Haight Creek, 1 mile southwest of Alma, and at mile 80.8.	120	1968-73	12-22-72	7.34	1,230
14306960	Esmond Creek near Austa, Oreg.	Lat 43°54'55", long 123°38'40", in NE¼ sec.16, T.19 S., R.8 W., Lane County, on right bank, 200 ft below Leopold Creek, 6.2 miles south of Austa, and at mile 1.68.	15.6	1968-73	12-22-72	5.1	920
14306980	Wolf Creek near Austa, Oreg.	Lat 43°58'00", long 123°36'30", in NW¼ sec.36, T.18 S., R.8 W., Lane County, on right bank 1.1 miles below Saleratus Creek, 3.3 miles southeast of Austa, and 1.5 miles above mouth.	59.0	1968-73	12-22-72	6.69	1,400
14307020	Chickahominy Creek near Walton, Oreg.	Lat 44°01'55", long 123°35'20", in SW¼ sec.6, T.18 S., R.7 W., Lane County, on left bank 0.2 mile above mouth, and 0.4 mile west of Walton.	12.5	1968-73	12-22-72	4.12	383
14307050	Wildcat Creek near Austa, Oreg.	Lat 43°59'35", long 123°37'20", in NW¼ sec.23, T.18 S., R.8 W., Lane County, on right bank 1.0 mile below Fowler Creek, 1.5 miles southeast of Austa and 3.1 miles above mouth.	51.9	1968-73	12-22-72	5.41	1,410
14307500	Lake Creek at Triangle Lake, Oreg.	Lat 44°09'40", long 123°34'10", in SW¼ sec.20, T.16 S., R.7 W., Lane County, on right bank 600 feet downstream from outlet of Triangle Lake, and at mile 18.81.	52.5	1931-55† 1968-73	12-21-72	4.16	1,200
14307570	Deadwood Creek near Deadwood, Oreg.	Lat 44°06'35", long 123°45'05", in SW¼NE¼ sec.10, T.17 S., R.9 W., Lane County, on left bank 1.0 mile north of Deadwood and 4.0 miles above mouth.	57.4	1968-73	12-21-72	10.78	3,420
14307600	Indian Creek near Rainrock, Oreg.	Lat 44°06'45", long 123°50'55", in NE¼ sec.11, T.17 S., R.10 W., Lane County, on left bank 150 ft above Elk Creek, 2.6 miles north of Rainrock, and 7.71 miles above mouth.	37.0	1968-73	12-21-72	8.93	3,040
14307610	Siuslaw River tributary near Rainrock, Oreg.	Lat 44°04'00", long 123°52'45", in NW¼ sec.27, T.17 E., R.10 W., Lane County, at culvert on State Highway 36, at mouth, and 1.3 miles west of Rainrock.	.42	1957-73	12-21-72	6.84	21
14307625	Knowles Creek near Mapleton, Oreg.	Lat 44°01'40", long 123°50'10", in NE¼ sec.12, T.18 S., R.10 W., Lane County, on right bank 1.0 miles east of Mapleton, 1.2 miles downstream from Jackson Creek, 3.0 miles southwest of Swisshome, and at mile 2.8.	17.7	1968-73	12-21-72	5.98	1,560

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
SIUSLAW RIVER BASIN--Continued							
14307630	Sweet Creek near Beck, Oreg.	Lat 43°59'10", long 123°54'10", in NW¼ sec.28, T.18 S., R.10 W., Lane County, on both banks 1.3 miles downstream from Cedar Creek, 3.4 miles southwest of Mapleton and 3.3 miles upstream from mouth.	19.8	1968-73	12-21-72	5.91	1,510
14307640	Sam Creek near Minerva, Oreg.	Lat 44°09'08", long 123°56'49", in NE¼ sec.25, T.16 S., R.11 W., Lane County, in Siuslaw National Forest, at culvert on Forest Service road 1658, 5.5 miles north of Minerva.	2.58	1965-73	12-24-72	10.62	236
14307648	Condon Creek near Minerva, Oreg.	Lat 44°03'20", long 124°00'30", in NE¼ sec.33, T.17 S., R.11 W., Lane County, on right bank 1.5 miles downstream from Billie Creek, 2.5 miles southwest of Minerva and 1.3 miles above mouth.	9.91	1968-73	12-21-72	2.61	443
UMPQUA RIVER BASIN							
14307685	Mult Creek near Tiller, Oreg.	Lat 43°06'00", long 122°44'55", in SW¼ sec.30, T.28 S., R.1 E., Douglas County, in Umpqua National Forest, at culvert on Forest Service road 2719, at mouth, and 15.5 miles northeast of Tiller.	2.65	1965-73	12-20-72	9.76	130
14308950	Beaver Creek near Drew, Oreg.	Lat 42°48'40", long 122°59'30", in NE¼NE¼ sec.12, T.32 S., R.3 W., Douglas County, in Umpqua National Forest, at culvert on Forest road 3232, 0.2 mile upstream from mouth and 7 miles southwest of Drew.	1.61	1965-73	12-21-72	7.90	30
14312100	Parrott Creek at Roseburg, Oreg.	Lat 43°11'45", long 123°20'50", in NE¼ sec.25, T.27 S., R.6 W., Douglas County, at culvert on Starmer Street between Marsters and Booth Streets in Roseburg, 0.5 mile upstream from mouth.	2.42	1952-73	12-21-72	9.01	16
14312700	Thielsen Creek near Diamond Lake, Oreg.	Lat 43°13'10", long 122°08'15", in SW¼ sec.17, T.27 S., R.6 E., (unsurveyed), Douglas County, in Umpqua National Forest, at culvert on State Highway 209, and 3 miles north of resort of Diamond Lake.	12.2	1966-73	5-16-73	9.05	5.6
14316600	Dog Creek near Idleyld Park, Oreg.	Lat 43°17'55", long 122°38'15", in NE¼ sec.24, T.26 S., R.1 E., Douglas County, in Umpqua National Forest, at culvert on State Highway 138, 6.5 miles southeast of Steamboat ranger station, and 19 miles east of Idleyld Park.	3.93	1965-73	12-21-72	8.22	76
14317700	White Creek near Peel, Oreg.	Lat 43°13'20", long 122°51'10", in NW¼ sec.17, T.27 S., R.1 W., Douglas County, in Umpqua National Forest, at culvert on Forest Service road 274, 0.4 mile upstream from mouth, and 9.5 miles east of Peel.	3.92	1965-73	12-21-72	9.62	113
14320600	Cabin Creek tributary near Oakland, Oreg.	Lat 43°26'10", long 123°18'45", in SE¼ sec.32, T.24 S., R.5 W., Douglas County, at culvert on U.S. Highway 99, 0.2 mile upstream from mouth, and 1.0 mile northwest of Oakland.	1.28	1957-73	12-20-72	9.33	58
14322850	Sawyer Creek near Elkton, Oreg.	Lat 43°35'54", long 123°40'12", in NW¼SE¼ sec.5, T.23 S., R.8 W., Douglas County, at culvert on BLM Sawyer Creek road, 6 miles southwest of Elkton.	.30	1971-73	12-22-72	8.73	16
14323020	Buck Creek tributary near Scottsburg, Oreg.	Lat 43°35'30", long 123°46'00", in NE¼NE¼ sec.9, T.23 S., R.9 W., Douglas County, at culvert on Buck Creek road, at mouth, and 5 miles south of Scottsburg.	.05	1971-73	12-22-72	8.32	1.0
14323170	Smith River tributary near Gardiner, Oreg.	Lat 43°44'35", long 124°02'30", in SW¼SW¼ sec.17, T.21 S., R.11 W., Douglas County, at culvert on Smith River road, 3.5 miles east of Gardiner.	.13	1971-73	10-16-72	7.75	1.0
TENMILE CREEK BASIN							
14323300	Eel Creek at Lakeside, Oreg.	Lat 43°34'50", long 124°11'00", in NE¼NE¼ sec.13, T.23 S., R.13 W., Coos County, at Lakeside Junction 0.8 mile west of Lakeside.	11.0	1958-73	12-25-72	2.18	86
COOS RIVER BASIN							
14324520	Dagget Creek near Allegany, Oreg.	Lat 43°27'45", long 124°03'05", in N½ sec.30, T.24 S., R.11 W., Coos County, at culvert on West Fork Millicoma River road, 5 miles north of Allegany.	.35	1971-73	12-17-72	11.65	15

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		COQUILLE RIVER BASIN					
14326600	Gettys Creek near Myrtle Point, Oreg.	Lat 43°00'30", long 124°12'40", in SE¼SE¼ sec.35, T.29 S., R.13 W., Coos County, at culvert on county road, 0.2 mile upstream from mouth, and 5.5 miles southwest of Myrtle Point.	1.45	1953-73	1-13-73	9.20	40
14326820	Middle Creek tributary near McKinley, Oreg.	Lat 43°11'30", long 124°01'25", in SE¼SE¼ sec.29, T.27 S., R.11 W., Coos County, at culvert on Middle Creek road, 0.6 mile north of McKinley, and 8 miles east of Coquille.	1.29	1971-73	1-13-73	17.48	22
14327050	Glen Aiken Creek tributary near Coquille, Oreg.	Lat 43°08'50", long 124°09'50", in SE¼NE¼ sec.18, T.28 S., R.12 W., Coos County, at culvert on Glen Aiken Creek road, 3 miles southeast of Coquille.	.33	1971-73	1-13-73	8.71	7.2
		ELK CREEK BASIN					
14327240	Milbury Creek near Port Orford, Oreg.	Lat 43°43'20", long 124°15'00", in NW¼ sec.16, T.33 S., R.13 W., Curry County, in Siskiyou National Forest, at culvert on Forest Service road 325, at mouth, and 13 miles east of Port Orford.	.80	1966-73	12-18-72	28.44	103
		BRUSH CREEK BASIN					
14327400	Dry Run Creek near Port Orford, Oreg.	Lat 42°41'20", long 124°26'00", in NW¼ sec.25, T.33 S., R.15 W., Curry County, at culvert in Humbug Mountain State Park and 5 miles southeast of Port Orford.	.86	1954-73	1-13-73	14.82	46
		ROGUE RIVER BASIN					
14335080	Fireline Creek near Butte Falls, Oreg.	Lat 42°34'10", long 122°24'10", in SE¼ sec.36, T.34 S., R.3 E., Jackson County, in Rogue River National Forest, at culvert on Forest Service road 3520B, 0.8 mile upstream from mouth, and 8 miles east of Butte Falls.	4.77	1965-73	1-15-73	8.07	16
14354400	Butler Creek near Ashland, Oreg.	Lat 42°13'30", long 122°44'05", in NE¼ sec.31, T.38 S., R.1 E., Jackson County, at culvert on Interstate Highway 5, 0.3 mile upstream from mouth, and 1.4 miles northwest of Ashland.	5.11	1963-73	1-13-73	18.90	9.2
14361300	Jones Creek near Grants Pass, Oreg.	Lat 42°26'10", long 123°17'10", in SE¼ sec.16, T.36 S., R.6 W., Josephine County, at culvert on Interstate Highway 5 and traffic interchange for Foothill Boulevard, and 2 miles east of Grants Pass.	7.41	1952-73	1-13-73	14.67	264
14362050	Kinney Creek near McKee Bridge, Oreg.	Lat 42°05'35", long 123°07'40", in NW¼ sec.13, T.40 S., R.4 W., Jackson County, in Rogue River National Forest, at culvert on Forest Service road 405, 1.3 miles upstream from mouth, and 4 miles southwest of McKee Bridge.	2.83	1965-73	1-13-73	8.14	15
14373900	Windy Creek near Holland, Oreg.	Lat 42°07'30", long 123°21'45", in SW¼ sec.36, T.39 S., R.6 W., Josephine County, in Siskiyou National Forest, at culvert on Forest Service road 3941, 0.1 mile upstream from mouth, 2.5 miles north of Oregon Caves National Monument, and 10 miles east of Holland.	2.02	1966-73	1-12-73	9.78	43
14377800	Snailback Creek near Selma, Oreg.	Lat 42°17'05", long 123°41'40", in NW¼ sec.7, T.38 S., R.8 W., Josephine County, at culvert on county road, 0.5 mile above mouth and 4.2 miles west of Selma.	1.62	1956-73	12-16-72	90.40	48
		HUNTER CREEK BASIN					
14378550	Hunter Creek near Gold Beach, Oreg.	Lat 42°24'25", long 124°15'05", in NW¼ sec.4 (unsurveyed), T.37 S., R.13 W., Curry County, in Siskiyou National Forest, at culvert on Forest Service road 368, 8.5 miles east of Gold Beach.	.98	1965-73	1-12-73	9.46	180
		RANSOM CREEK BASIN					
14378900	Ransom Creek near Brookings, Oreg.	Lat 42°03'45", long 124°18'00", in NE¼ sec.1, T.41 S., R.14 W., Curry County, at culvert on U.S. Highway 101, 0.1 mile upstream from mouth, and 1.2 miles northwest of Brookings.	.74	1953-73	12-18-72	23.89	73

* Revised.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Approximately.
b No flow observed.

Measurements of streamflow at point, other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterick (*), measurements of peak flow by a (†).

Discharge measurements at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 10		WHITEHORSE VALLEY BASIN				
Whitehorse Creek	Whitehorse Valley	SW¼SW¼ sec.18, T.38 S., R.39 E.	-	-	7-24-73	*5.29
Do......	.....do.....	NW¼NW¼ sec.13, T.37 S., R.36 E.	-	-	1-16-73 2-18-73	*9.04 *6.01
Willow Creek	.....do.....	NW¼SW¼ sec.27, T.37 S., R.36 E.	-	-	2-20-73 7-24-73	*6.25 3.03
Part 11		KLAMATH RIVER BASIN				
Big Springs Creek	Williamson River in Klamath Marsh	SE¼ sec.22, T.30 S., R.8 E.	a80	1915-27, 1930, 1949-54, 1956-57, 1959-62, 1964-71	9-11-73	*34.2
Williamson River	Upper Klamath Lake	NW¼ sec.2, T.34 S., R.7 E.	a1,330	1912-13‡, 1917-25‡, 1942, 1949-54, 1956, 1959-62, 1964-71	9-12-73	*22.6
Larkin Creek	Williamson River	SW¼ sec.11, T.34 S., R.7 E.	(b)	1924-25, 1950-53, 1956, 1957-62, 1964-71	9-12-73	*10.5
Shakespeare Creek	.....do.....	SE¼SE¼ sec.10, T.34 S., R.7 E.	(b)	1964-71	9-12-73	*9.05
Spring Creek	.....do.....	NE¼ sec.9, T.34 S., R.7 E.	21.0	1905, 1914-17, 1919-20, 1922-29, 1931-1934, 1949-54, 1956, 1959-62, 1964-71	9-11-73	*314
Fivemile Creek	North Fork Sprague River	Sec.34, T.35 S., R.13 E.	a40	1917-21‡, 1922-23, 1925-26, 1949-54, 1956, 1959-71	9-18-73	*21.6
Medicine Springs	Sprague River	SE¼NE¼ sec.13, T.36 S., R.12 E.	(b)	1966-71	9-12-73	*18.2
Sycan River	.....do.....	SE¼ sec.8, T.35 S., R.12 E.	a540	1912-14, 1915-25‡, 1926, 1949-54, 1956, 1959-71	9-18-73	*14.1
Kam Kaun (McCready) Springs	.....do.....	Sec.25, T.34 S., R.8 E.	(b)	1949, 1951-54, 1956, 1959-62, 1964-71	9-12-73	*44.2
Annie Creek	Wood River	NE¼ sec.36, T.32 S., R.6 E.	a40	1923-27‡, 1931, 1949-53, 1955-56, 1959-71	9-17-73	*46.6
Wood River Springs	.....do.....	SE¼ sec.3, T.33 S., R.7½ E.	(b)	1956, 1959-71	9-17-73	*248

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 11		KLAMATH RIVER BASIN--Continued				
Wood River	Agency Lake	NW¼ sec.22, T.33 S., R.7½ E.	a90	1904-10, 1911-36‡, 1949-71	9-17-73	*223
Fort Creek	Wood River	SW¼ sec.26, T.33 S., R.7½ E.	(b)	1906-11, 1915-18, 1920-21, 1923-25, 1927-29, 1931, 1949-53, 1955-56, 1959-71	9-19-73	*101
Crooked Creek	Agency Lake	SE¼ sec.13, T.34 S., R.7½ E.	-	1905-09, 1915-18, 1920-21, 1923-24, 1928, 1949-50, 1952-53, 1956, 1959-65, 1965-67‡	9-19-73	*53.6
Spencer Creek	Klamath River	SW¼ sec.20, T.39 S., R.7 E.	a90	1927, 1929-32‡, 1934, 1949-53, 1955-56, 1959-71	9-11-73	*9.98
Part 13		MALHEUR RIVER BASIN				
Malheur River	Snake River	NE¼SE¼ sec.5, T.20 S., R.34 E.	-	1939, 1941, 1943	7-12-73	*33.2
South Fork Malheur River	Malheur River	NE¼SW¼ sec.35, T.24 S., R.36 E.	-		8-14-73	*4.35
Part 13		SNAKE RIVER BASIN				
Imnaha River	Snake River	NW¼ sec.31, T.4 S., R.48 E.	99.6	1944-53‡, 1954-64	9-20-73	91.3
Part 13		GRANDE RONDE RIVER BASIN				
Wallowa River	Grande Ronde River	SE¼SE¼ sec. 20, T.3 S., R.45 E.	a43	1905, 1907-08, 1924-33‡, 1936-38‡, 1940-41‡, 1950-51, 1955, 1961	7-25-73 8-15-73	*93.0 *60.6
Lookingglass Creek	.....do.....	Sec.29, T.3 N., R.40 E.	-	1955-64	9-14-73	57.5
Wenaha River	.....do.....	Sec.4, T.5 N., R.43 E.	-		9-18-73	159
Part 14		UMATILLA RIVER BASIN				
Meecham Creek	Umatilla River	NE¼NE¼ sec.31, T.3 N., R.36 E.	177	1907, 1910, 1912-13, 1952-57, 1960-61, 1963-68	8-10-73	*7.94
McKay Creek	.....do.....	SW¼SE¼ sec.1, T.1 S., R.33 E.	-		8-10-73	*.92

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		JOHN DAY RIVER BASIN				
Desolation Creek	North Fork John Day River	SW¼ sec.6, T.7 S., R.32 E.	108	1949-58†, 1959-65	9-10-73	*6.51
North Fork John Day River	John Day River	SE¼SE¼ sec.35, T.6 S., R.31 E.	525	1929-58†	9-10-73	*36.2
John Day River	Columbia River	NE¼NE¼ sec.3, T.10 S., R.20 E.	-	--	8-14-73	*7.13
Do......	.....do.....	Sec.32, T.7 S., R.19 E.	-	-	9-11-73	*26.2
Part 14		DESCHUTES RIVER BASIN				
Deschutes River	Columbia River	NW¼NW¼ sec.28, T.21 S., R.8 E.	-	1938-49†, 1950, 1952-57, 1960-72	11-17-72	c512
					1-16-73	c496
					3- 8-73	c392
					4-30-73	c692
					6- 7-73	c917
					7- 9-73	c648
					8- 3-73	c608
					8-23-73	c690
					9-19-73	c635
Davis Creek tributary	Davis Creek	SE¼SW¼ sec.5, T.22 S., R.8 E.	-	1943, 1945-46, 1949, 1951, 1955, 1959-61, 1967-71	8- 9-73	*16.2
					9- 5-73	*14.1
South Fork Davis Creek	.....do.....	SE¼NE¼ sec.18, T.22 S., R.8 E.	-	-	8- 9-73	*60.0
Middle Fork Davis Creek	.....do.....	NW¼NE¼ sec.18, T.22 S., R.8 E.	-	1967-68	8- 9-73	*83.0
North Fork Davis Creek	.....do.....	SW¼SE¼ sec.7, T.22 S., R.8 E.	-	1967-68	8- 9-73	*71.8
Davis Creek	Deschutes River	SE¼SE¼ sec.7, T.22 S., R.8 E.	-	1904, 1914, 1922-26, 1934, 1944-45, 1959-70	9- 5-73	*200
Little Deschutes River	.....do.....	SE¼NE¼ sec.34, T.23 S., R.9 E.	-	1897, 1904-05, 1908, 1913-14	8-16-73	*251
Squaw Creek	.....do.....	SW¼NW¼ sec.16, T.16 S., R.9 E.	-	-	9-17-73	*52.6
Metolius River	.....do.....	NW¼SW¼ sec.2, T.12 S., R.9 E.	-	-	10-12-72	1,300
					11- 9-72	1,340
					12-14-72	1,370
					1- 9-73	1,360
					2- 7-73	1,350
					3- 7-73	1,280
					4- 2-73	1,290
					5- 3-73	1,250
					5-30-73	1,230
					7- 3-73	1,190
					8- 2-73	1,170
					8-31-73	1,180
Abbot Creek	Metolius River	SW¼NW¼ sec.2, T.12 S., R.9 E.	6.43	-	10-12-72	12.0
					12-14-72	10.0
					2-7-73	13.8
					4- 2-73	12.5
					5-30-73	11.2
					8- 2-73	10.8

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		DESCHUTES RIVER BASIN--Continued				
Candle Creek	Metolius River	SW¼NW¼ sec.3, T.12 S., R.9 E.	17.3	-	10-12-72	103
					12-14-72	74.2
					2- 7-73	98.9
					4- 2-73	91.4
					5-30-73	82.5
					8- 2-73	75.6
Jefferson Creek	......do.....	SW¼SE¼ sec.34, T.11 S., R.9 E.	27.8	-	10-12-72	97.9
					11- 9-72	87.6
					12-14-72	65.0
					1- 9-73	83.5
					2- 7-73	85.7
					3- 7-73	75.5
					4- 2-73	61.2
					5- 3-73	76.9
					5-30-73	86.0
					7- 3-73	75.0
					8- 2-73	73.4
					8-31-73	64.9
Whitewater Creek	.....do.....	SE¼SW¼ sec.21, T.10 S., R.10 E.	31.8	-	10- 3-72	60.4
					11- 9-72	59.3
					1- 8-73	73.2
					2- 5-73	67.6
					3- 6-73	54.6
					4- 2-73	49.8
					5- 2-73	36.8
					5-30-73	85.1
					7- 2-73	63.8
					8- 2-73	83.8
					8-31-73	*49.7
Seekseekqua Creek	Deschutes River	SE¼SW¼ sec.27, T.10 S., R.12 E.	93.3	-	10- 3-72	*1.70
					11- 8-72	2.11
					12-14-72	2.12
					1- 8-73	2.28
					2- 6-73	3.54
					3- 6-73	4.96
					4- 3-73	3.21
					5- 2-73	2.26
					5-30-73	*1.36
					7- 5-73	*.98
					8- 2-73	*.83
					8-31-73	*1.00
Willow Creek	.....do.....	SE¼NW¼ sec.30, T.10 S., R.13 E.	-	-	6- 7-73	25.5
Campbell Creek	.....do.....	SE¼SW¼ sec.7, T.10 S., R.13 E.	-	-	6- 7-73	20.6
Tenino Creek	Shitike Creek	NE¼SW¼ sec.26, T.9 S., R.12 E.	20.7	-	2- 5-73	.15
					5-31-73	*.05
Dry Creek	Deschutes River	NW¼SE¼ sec.17, T.9 S., R.13 E.	33.7	-	10- 4-72	*.05
					12-13-72	*0
					2- 5-73	*.02
					4- 6-73	*.25
					5-31-73	*0
					8- 3-73	*0
Trout Creek	.....do.....	SW¼NE¼ sec.5, T.9 S., R.14 E.	-	-	6- 7-73	8.06
Do......	.....do.....	SE¼SE¼ sec.4, T.9 S., R.15 E.	-	-	12-19-72	*11.2
Warm Springs River	.....do.....	NW¼SE¼ sec.36, T.6 S., R.8 E.	18.0	-	10-10-72	*1.40
					5-29-73	*2.03
Do......	.....do.....	NW¼NE¼ sec.6, T.7 S., R.9 E.	23.7	-	10-11-72	*1.58
					5-31-73	*2.24
					6- 4-73	*2.29
Badger Creek	Warm Springs River	NE¼SW¼ sec.20, T.7 S., R.11 E.	37.2	-	2- 6-73	25.9
					4- 4-73	21.9
Mill Creek	.....do.....	SW¼ sec.12, T.9 S., R.8 E.	5.6	-	10-10-72	*.10
					5-29-73	7.07
Do......	.....do.....	SE¼ sec.12, T.9 S., R.8 E.	-	-	10-10-72	*.18

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14	DESCHUTES RIVER BASIN--Continued					
Mill Creek	Warm Springs River	SE¼NW¼ sec.19, T.8 S., R.11 E.	57.6	-	2- 6-73	65.4
					4- 4-73	50.4
					6- 5-73	53.7
					8- 3-73	33.4
Boulder Creek	Mill Creek	SE¼SE¼ sec.31, T.8 S., R.11 E.	28.4	-	2- 6-73	6.96
					4- 4-73	4.29
					6- 5-73	0
					8- 3-73	0
Beaver Creek	Warm Springs River	SE¼SW¼ sec.11, T.6 S., R.10 E.	32.1	-	10- 4-72	*11.6
					11- 8-72	*13.1
					12-13-72	7.73
					1- 8-73	18.4
					2- 6-73	23.0
					3- 5-73	21.9
					4- 3-73	19.6
					5- 2-73	19.6
					5-31-73	13.2
					7- 2-73	*10.4
					8- 3-73	*9.03
					8-30-73	*9.30
Indian Creek	Beaver Creek	SE¼SE¼ sec.11, T.6 S., R.10 E.	6.16	-	4- 3-73	*.86
Kelly Gulch	Coyote Creek	SE¼SE¼ sec.35, T.5 S., R.11 E.	-	-	10-11-72	*.05
Coyote Creek	Beaver Creek	NE¼SW¼ sec.14, T.7 S., R.11 E.	43.2	-	1-20-73	1.50
					2- 6-73	.92
				-	3- 5-73	2.93
					4- 3-73	.42
					5- 2-73	*.03
					5-31-73	*.01
					7- 2-73	*0
Beaver Creek	Warm Springs River	NE¼SW¼ sec.14, T.7 S., R.11 E.	115	-	10-11-72	*40.8
					11- 8-72	*62.1
					12-13-72	67.5
					1 -8-73	46.6
					2-16-73	60.0
					3- 5-73	55.2
					4- 3-73	52.9
					5- 2-73	51.4
					5-31-73	*39.2
					7- 2-73	*35.9
					8- 3-73	*36.0
					8-30-73	*35.2
Buck Springs	.....do.....	NW¼SE¼ sec.29, T.8 S., R.12 E.	-	-	7-20-73	*.58
Skookum Creek	Deschutes River	SW¼NW¼ sec.32, T.7 S., R.14 E.	-	-	10- 4-72	*.10
Antoken Creek	.....do.....	NW¼SE¼ sec.8, T.7 S., R.14 E.	4.87	-	10- 4-72	*0
Eagle Creek	.....do.....	SW¼SE¼ sec.24, T.6 S., R.13 E.	24.4	-	2- 5-73	1.00
					3- 5-73	.43
					4- 3-73	*.15
					5- 2-73	*.05
					5-30-73	*.03
					7- 2-73	*0
Deschutes River	Columbia River	SW¼NW¼ sec.19, T.6 S., R.16 E.	-	-	7- 6-73	4,300
Nena Creek	Deschutes River	NW¼SE¼ sec.22, T.6 S., R.12 E.	15.9	-	10-11-72	*.02
					11- 8-72	*.02

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		DESCHUTES RIVER BASIN--Continued				
Paquet Gulch	Deschutes River	SE¼SW¼ sec.3, T.6 S., R.12 E.	6.43	-	10-11-72 11- 8-72 12-13-72 1- 8-73 2- 6-73 3- 5-73 4- 3-73 5- 2-73 5-30-73 7- 2-73	*0.08 *.08 .07 .08 .38 .72 .25 .12 *.01 *0
Clear Creek tributary	Clear Creek	SE¼SE¼ sec.8, T.5 S., R.9 E.	-	-	5-29-73	*.18
Part 14		WILLAMETTE RIVER BASIN				
Waldo Lake tunnel	Black Creek	Outlet to unused tunnel from Klovdahl Bay in sec.36, T.21 S., R.5½ E. (unsurveyed)		1937, 1940, 1943, 1945, 1948, 1950-52, 1954, 1957, 1969-71	7-17-73	.36
Row River	Coast Fork Willamette River	NE¼NE¼ sec.27, T.20 S., R.3 W.	-	-	7-25-73	195
Coast Fork Willamette River	Willamette River	NW¼SW¼ sec.22, T.20 S., R.3 W.	-	-	7-25-73	47.9
Do......	.....do.....	SW¼NW¼ sec.12, T.18 S., R.3 W.	-	-	7-24-73	25.5
Bunchgrass Creek	Smith River	SW¼SW¼ sec.36, T.14 S., R.6 E.	-	-	9-14-73	*4.05
Horse Creek	McKenzie River	Lat 44°07'35", long 122°02'18" (unsurveyed)	-	-	9-13-73	31.7
Separation Creek	Horse Creek	Sec.1, T.17 S., R.6 E.	-	-	9-13-73	*212
Horse Creek	McKenzie River	SW¼ sec.36, T.16 S., R.6 E.	-	-	9-13-73	244
Do......	.....do.....	SW¼ sec.24, T.16 S., R.5 E.	149	-	9-12-73	*251
French Pete Creek	South Fork McKenzie River	Lat 44°02'32", long 122°11'40" (unsurveyed)	-	-	1-11-73 5-16-73 8- 9-73	61.3 111 *12.2
Haugen Creek	McKenzie River	SE¼ sec.17, T.17 S., R.1 E.	-	-	7- 5-73 8-13-73	*1.81 *.88 *.57
Quartz Creek	McKenzie River	SE¼NW¼ sec.6, T.17 S., R.4 E.	-	-	9-11-73	*6.98
McKenzie River	Willamette River	NW¼NE¼ sec.6, T.17 S., R.2 E.	-	-	1-20-73	640
Do......	.....do.....	NW¼NE¼ sec.26, T.17 S., R.1 W.	1,081	-	6-20-73 7-16-73	932 881
Shotgun Creek	Mohawk River	NW¼SW¼ sec.32, T.15 S., R.1 W.	-	-	9-13-73	*2.01
North Fork Rock Creek	Rock Creek	NE¼ sec.14, T.12 S., R.7 W.	-	-	9-11-73	*.96
South Fork Rock Creek	.....do.....	SE¼ sec.14, T.12 S., R.7 W.	-	-	9-11-73	*1.43
Stilson Creek	.....do.....	SE¼ sec.13, T.12 S., R.7 W.	-	-	9-12-73	*.20
Middle Fork Rock Creek	.....do.....	SE¼ sec.19, T.12 S., R.6 W.	-	-	9-12-73	*.31

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		WILLAMETTE RIVER BASIN--Continued				
Griffith Creek	Rock Creek	SE¼NW¼ sec.30, T.12 S., R.6 W.	-	-	9-11-73	*0.46
Rock Creek	Greasy Creek	NE¼ sec.29, T.12 S., R.6 W.	14.6	1945-52‡, 1953-60	9-11-73	*1.48
Marion Forks Creek	North Santiam River	SE¼NW¼ sec.22, T.11 S., R.7 E.	-	-	9-10-73	*141
Breitenbush River	.....do.....	NW¼ sec.25, T.9 S., R.8 E.	1.6	-	10-10-72 5-29-73	*.81 7.31
Little North Santiam River	.....do.....	SW¼NW¼ sec.22, T.8 S., R.4 E.	53.1	-	11-28-72 2-15-73 3-27-73 6- 4-73	434 191 246 93
Little Luckiamute River	Luckiamute River	SW¼SW¼ sec.22, T.8 S., R.6 W.	-	-	9-26-73	*58.2
Do......	.....do.....	NW¼NE¼ sec.36, T.8 S., R.6 W.	-	-	9-26-73	*66.6
Luckiamute River	Willamette River	NW¼NW¼ sec.2, T.10 S., R.4 W.	-	-	7-17-73 7-23-73 7-25-73 7-27-73 7-30-73 8- 1-73 8- 7-73	*15.2 *24.7 *13.1 *9.06 *7.66 *4.72 *.04
Canyon Creek	Rickreall Creek	SE¼SE¼ sec.33, T.7 S., R.6 W.	-	-	9-11-73	*.30
Rock Creek	South Yamhill River	NE¼NE¼ sec.13, T.6 S., R.8 W.	-	-	8-14-73	*6.45
Do......	.....do.....	NW¼SE¼ sec.14, T.6 S., R.8 W.	-	-	8-14-73	*7.83
Cow Creek	Rock Creek	NW¼NE¼ sec.13, T.6 S., R.8 W.	-	-	8-13-73	*.07
Molalla River	Willamette River	NE¼ sec.14, T.7 S., R.3 E.	-	-	9-10-73	*16.2
Gales Creek	Tualatin River	SW¼SE¼ sec.7, T.1 S., R.3 W.	74.0	1966	10-12-72 11-28-72 1- 2-73 2-12-73 3-26-73 5-10-73 8- 1-73 9- 6-73	17.5 87.5 400 155 180 19.9 .06 .89
West Fork Dairy Creek	Dairy Creek	SW¼NW¼ sec.17, T.1 N., R.3 W.	77.2	1967	10-25-72 11-30-72 12-28-72 1- 4-73 2-13-73 3-29-73 5-10-73 6-18-73 7-31-73 9- 6-73	*7.20 35.0 823 343 106 117 46.0 18.8 *0 *0
East Fork Dairy Creek	.....do.....	SE¼SW¼ sec.9, T.1 N., R.3 W.	65.5	1967	10-30-72 11-30-72 12-28-72 1- 4-73 2-13-73 3-29-73 5-10-73 6-18-73 7-31-73 9- 6-73	*11.5 31.3 671 227 94.6 114 43.3 23.2 *3.61 *6.95

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		WILLAMETTE RIVER BASIN--Continued				
Rock Creek	Tualatin River	SW¼NW¼ sec.9, T.1 S., R.2 W.	74.0	-	10-17-72 11-30-72 12-29-72 1- 4-73 2-15-73 3-26-73 5-11-73 6- 8-73 8- 1-73 9- 7-73	*19.8 33.9 430 201 54.9 90.2 29.9 40.6 *11.3 *20.1
Fanno Creek	.....do.....	NE¼NW¼ sec.13, T.2 S., R.1 W.	31.5	1967	12- 1-72 12-29-72 2-14-73 3-27-73 5-11-73 6-18-73 8- 1-73 9- 7-73	*15.6 97.5 21.8 48.8 14.3 19.1 *6.46 24.7
Slow Creek	Lemiti Creek	NE¼ sec.1, T.8 S., R.8 E.	9	-	10-10-72 5-29-73	*.25 *2.58
Lemiti Creek	Clackamas River	NE¼ sec.2, T.8 S., R.8 E.	3.4	-	10-10-72 5-29-73	*.10 *5.00
Olallie Creek	.....do.....	SE¼ sec.24, T.8 S., R.8 E.	1.6	-	10-10-72 5-29-73	*1.35 *.10
Clackamas River	Willamette River	NW¼SE¼ sec.26, T.6 S., R.7 E.	136	-	9-17-73	*238
Oak Grove Fork	Clackamas River	NE¼SW¼ sec.25, T.5 S., R.8 E.	12.0	-	10-10-72 4- 6-73 5-29-73	*0 3.45 *.16
Clackamas Lake tributary	Oak Grove Fork	SW¼SE¼ sec.36, T.5 S., R.8 E.	1.06	-	10-10-72 5-29-73	*.05 *.10
Part 14		LOWER COLUMBIA RIVER BASIN				
Clatskanie River	Columbia River	E½ sec.36, T.7 N., R.4 W.	53.0	1954	9-11-73	*4.28
Waterworks Creek (site No. 1)	Bear Creek	NW¼SE¼ sec.7, T.7 N., R.7 W.	-	1968-71	2-22-73	1.10
Waterworks Creek (site No. 3)	.....do.....	SW¼SW¼ sec.1, T.7 N., R.7 W.	-	1968-71	2-22-73	7.00
Youngs River	Columbia River	NW¼ sec.27, T.7 N., R.9 W.	40.1	1927-58‡	9-11-73	*5.91
Part 14		NORTH COAST BASIN				
Miami River	Tillamook Bay	NE¼NW¼ sec.2, T.1 N., R.10 W.	-	-	8- 8-73	*13.8
Do......	.....do.....	SE¼SW¼ sec.14, T.1 N., R.10 W.	-	-	8- 8-73	*27.7
Part 14		KILCHIS RIVER BASIN				
Little South Fork Kilchis River	Kilchis River	Sec.28, T.1 N., R.9 W.	-	-	9-11-73	*7.90
Kilchis River	Pacific Ocean	Sec.28, T.1 N., R.9 W.	-	1965-67	9-11-73	*21.8
Do......	.....do.....	SW¼SE¼ sec.32, T.1 N., R.9 W.	-	-	8- 8-73	*51.2
Do......	.....do.....	SW¼SE¼ sec.6, T.1 S., R.9 W.	-	-	8- 8-73	*50.7
Part 14		TRASK RIVER BASIN				
Trask River	.....do.....	NW¼NW¼ sec.31, T.1 S., R.8 W.	-	-	8- 8-73 9-12-73	*94.5 *62.6

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		CAPE CREEK BASIN				
Cape Creek	Pacific Ocean	SW¼SW¼ sec.36, T.2 S., R.11 W.	-	-	8-30-73	*0.83
Part 14		NORTH COAST BASIN				
Little Nestucca River	Nestucca River	NE¼NE¼ sec.16, T.5 S., R.10 W.	-	-	7-13-73 8- 9-73 9- 6-73	*53.5 *26.2 *19.1
Part 14		NESKOWIN CREEK BASIN				
Neskowin Creek	Pacific Ocean	NE¼SE¼ sec.6, T.6 S., R.10 W.	-	-	8- 9-73 9- 6-73	*7.44 *5.49
Do......	.....do.....	Sec.36, T.5 S., R.11 W.	-	-	7-13-73	*21.5
Part 14		SALMON RIVER BASIN				
Treat Creek	Salmon River	SE¼SE¼ sec.25, T.6 S., R.10 W.	-	-	7-18-73 8-30-73	*3.14 *1.52
Slick Rock Creek	.....do.....	NW¼NE¼ sec.6, T.7 S., R.9 W.	-	1960	7-23-73 8-13-73 8-30-73	*14.9 *8.86 *7.36
Trout Creek	Slick Rock Creek	NW¼NW¼ sec.1, T.7 S., R.10 W.	-	-	9-22-73	*3.40
Bear Creek	Salmon River	SE¼NE¼ sec.3, T.7 S., R.10 W.	-	-	10- 6-72 12-11-72 5-21-73 7-18-73 8-20-73	3.11 14.2 7.97 *6.67 *4.52
Panther Creek	Salmon River	SE¼NE¼ sec.34, T.6 S., R.10 W.	-	-	7-18-73 7-30-73 8-20-73 9-10-73 9-15-73	*1.80 *1.33 *.91 *.77 *1.25
Salmon River	Pacific Ocean	NE¼SW¼ sec.29, T.6 S., R.10 W.	-	-	7-13-73 7-16-73 8- 9-73 8-13-73 8-14-73 9- 6-73 9-10-73 9-18-73	*72.6 *69.7 *43.2 *43.1 *41.4 *40.3 *36.7 *40.5
Part 14		"D" RIVER BASIN				
Thompson Creek	Devils Lake	NE¼SW¼ sec.1, T.7 S., R.11 W.	-	-	5-14-73	*.44
Rock Creek	.....do.....	NE¼SW¼ sec.14, T.7 S., R.11 W.	-	-	5-14-73 7-24-73 9-18-73	*11.0 *9.69 *6.80
Part 14		BALDY CREEK BASIN				
Baldy Creek	Pacific Ocean	SW¼SE¼ sec.22, T.7 S., R.11 W.	0.53	-	5-14-73 7-24-73 9-11-73 9-18-73	*1.07 *.66 *.80 *.60
Part 14		SCHOONER CREEK BASIN				
North Fork Schooner Creek	Schooner Creek	SW¼NE¼ sec.21, T.7 S., R.10 W.	-	-	7-13-73 8- 9-73 9- 6-73	*7.56 *4.59 *4.62
South Fork Schooner Creek	......do.....	SW¼NE¼ sec.26, T.7 S., R.10 W.	-	-	6-18-73	*5.85

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		SCHOONER CREEK BASIN--Continued				
Part 14						
Schooner Creek	Pacific Ocean	SE¼NE¼ sec.25, T.7 S., R.11 W.	14.8	-	5-14-73 7-24-73 9-18-73	*34.9 *26.1 *16.7
Erickson Creek	Schooner Creek	NE¼NE¼ sec.19, T.7 S., R.10 W.	-	-	7-13-73 8- 9-73 9- 6-73	*4.80 *4.34 *3.92
		DRIFT CREEK BASIN				
Part 14						
Drift Creek	Pacific Ocean	SE¼SW¼ sec.36, T.7 S., R.10 W.	37.6	-	5-14-73 6-14-73 7-14-73 8-14-73 9-14-73	*88.2 *75.9 *64.4 *36.4 *32.6
		SILETZ RIVER BASIN				
Part 14						
Euchre Creek	Siletz River	NW¼NW¼ sec.22, T.9 S., R.10 W.	13.4	-	6-14-73 7-17-73 8-14-73 9-19-73	*29.1 *20.7 *10.9 *14.1
		SCHOOLHOUSE CREEK BASIN				
Part 14						
Schoolhouse Creek	Pacific Ocean	NW¼NW¼ sec.21, T.8 S., R.11 W.	1.13	-	5-14-73 7-24-73 9- 5-73 9-18-73	*.23 *.40 *.20 *.20
		FOGARTY CREEK BASIN				
Part 14						
Fogarty Creek	Pacific Ocean	NE¼NE¼ sec.32, T.8 S., R.11 W.	5.20	-	5-14-73 7-24-73 9-18-73	*4.60 *2.81 *2.04
		SOUTH DEPOE BAY CREEK BASIN				
Part 14						
South Depoe Bay Creek	.....do.....	SW¼NE¼ sec.8, T.9 S., R.11 W.	3.98	-	5-14-73 7-24-73 9-18-73	*3.80 *2.84 *1.70
		ROCKY CREEK BASIN				
Part 14						
Rocky Creek	.....do.....	SW¼NE¼ sec.19, T.9 S., R.11 W.	5.36	-	6-14-73 7-17-73 8-14-73 9-10-73 9-18-73	*9.51 *5.59 *2.47 *1.77 *2.98
		SPENCER CREEK BASIN				
Part 14						
Spencer Creek	.....do.....	NW¼SW¼ sec.4, T.10 S., R.11 W.	5.51	-	5-14-73 7-24-73 9-18-73	*6.46 *3.97 *3.16
		JOHNSON CREEK BASIN				
Part 14						
Johnson Creek	.....do.....	NE¼NE¼ sec.5, T.10 S., R.11 W.	-	-	9-10-73	*.41
		COAL CREEK BASIN				
Part 14						
Coal Creek	.....do.....	NE¼NW¼ sec.17, T.10 S., R.11 W.	2.19	-	5-14-73 7-24-73 9-18-73	*2.42 *1.48 *1.19

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		MOLOCH CREEK BASIN				
Moloch Creek	Pacific Ocean	NW¼SE¼ sec.17, T.10 S., R.11 W.	2.23	-	6-14-73	*3.58
					7-17-73	*2.09
					8-14-73	*1.14
					9-18-73	*1.14
Part 14		WADE CREEK BASIN				
Wade Creek	.....do.....	NW¼SE¼ sec.8, T.10 S., R.11 W.	-	-	7-27-73	*1.42
					8-27-73	*1.15
Part 14		BIG CREEK BASIN				
Big Creek	.....do.....	NW¼SW¼ sec.34, T.10 S., R.11 W.	.90	-	5-15-73	*1.07
					7-25-73	*.68
					9-19-73	*1.10
Blattner Creek	Big Creek	NW¼NW¼ sec.34, T.10 S., R.11 W.	1.09	-	5-15-73	*1.25
					7-25-73	*.76
					9-19-73	*1.20
Big Creek	Pacific Ocean	NW¼SE¼ sec.32, T.10 S., R.11 W.	5.08	-	5-15-73	*4.36
					7-25-73	*4.14
					9-19-73	*3.90
Part 14		YAQUINA RIVER BASIN				
Elk Creek	Yaquina River	NW¼SW¼ sec.13, T.11 S., R.10 W.	85.0	-	6-14-73	*41.2
					7-17-73	*22.8
					8-15-73	*11.0
					9-19-73	*10.4
Depot Creek	.....do.....	SE¼SE¼ sec.31, T.10 S., R.10 W.	9.08	-	8-15-73	*2.50
					9-19-73	*3.00
Part 14		HENDERSON CREEK BASIN				
Henderson Creek	Pacific Ocean	SE¼NE¼ sec.30, T.11 S., R.11 W.	.85		5-15-73	*1.08
					7-25-73	*.78
					9-11-73	*.66
					9-19-73	*1.24
Part 14		THIEL CREEK BASIN				
Thiel Creek	.....do.....	NW¼NE¼ sec.6, T.12 S., R.11 W.	4.10	-	6-15-73	*4.27
					7-18-73	*3.00
					8-16-73	*1.60
					9-19-73	*4.20
Part 14		LOST CREEK BASIN				
Lost Creek	Pacific Ocean	SE¼NW¼ sec.7, T.12 S., R.11 W.	.40	-	5-17-73	*.40
					7-25-73	*.36
Part 14		BEAVER CREEK BASIN				
Elkhorn Creek	Beaver Creek	SE¼NE¼ sec.27, T.12 S., R.11 W.	-	-	7-31-73	*4.65
					8-27-73	*3.21
North Fork Beaver Creek	.....do.....	NW¼SW¼ sec.22, T.12 S., R.11 W.	14.3	-	6-15-73	*22.7
					7-18-73	*23.3
					8-15-73	*12.1
					9-19-73	*17.5
South Fork Beaver Creek	.....do.....	NE¼SW¼ sec.33, T.12 S., R.11 W.	5.97	-	5-16-73	*3.83
Beaver Creek	Pacific Ocean	NW¼SW¼ sec.22, T.12 S., R.11 W.	-	-	7-31-73	*17.0
					8-27-73	*12.2

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		COLLINS CREEK BASIN				
Collins Creek	Pacific Ocean	NE¼SE¼ sec.36, T.12 S., R.12 W.	1.51	-	5-17-73 7-25-73 9-19-73	*1.76 *1.41 *1.77
Part 14		FOX CREEK BASIN				
Fox Creek	.....do.....	SE¼NE¼ sec.1, T.13 S., R.12 W.	.39	-	5-17-73 7-25-73 9-19-73	*1.17 *.73 *1.20
Part 14		DEER CREEK BASIN				
Deer Creek	.....do.....	SE¼SE¼ sec.24, T.12 S., R.12 W.	-	-	7-30-73 9-11-73	*.79 *.44
Part 14		ALSEA RIVER BASIN				
North Fork Alsea River	Alsea River	NE¼ sec.2, T.13 S., R.8 W.	-	-	8- 2-73	*2.19
Fall Creek	.....do.....	SE¼NE¼ sec.35, T.13 S., R.9 W.	-	-	9-11-73	*7.98
Lobster Creek	Five Rivers	NW¼SE¼ sec.19, T.14 S., R.9 W.	-	-	7-31-73	*11.7
Five Rivers	Alsea River	SE¼NW¼ sec.19, T.14 S., R.9 W.	-	-	7-31-73	*15.4
Drift Creek	.....do.....	NE¼NE¼ sec.12, T.13 S., R.11 W.	-	-	5-16-73 6-15-73 7-18-73 8-15-73 9-19-73	*94.7 *71.3 *48.5 *29.7 *34.0
Part 14		GOVERNOR PATTERSON CREEK BASIN				
Governor Patterson Creek	Pacific Ocean	SW¼NE¼ sec.25, T.13 S., R.12 W.	-	-	5-16-73 7-25-73	*.62 *.48
Part 14		BIG CREEK BASIN				
Big Creek	.....do.....	SW¼SW¼ sec.2, T.14 S., R.12 W.	6.6	-	5-16-73 7-25-73	*9.42 *5.53
Part 14		VINGIE CREEK BASIN				
Vingie Creek	.....do.....	NE¼SW¼ sec.14, T.14 S., R.12 W.	1.74	-	5-16-73 7-18-73	*2.61 *2.21
Part 14		YACHATS RIVER BASIN				
North Fork Yachats River	Yachats River	SE¼NW¼ sec.35, T.14 S., R.11 W.	-	-	9-11-73	*3.65
Yachats River	Pacific Ocean	NE¼SW¼ sec.35, T.14 S., R.11 W.	-	-	7-31-73	*12.2
Do......	.....do.....	NW¼SE¼ sec.32, T.14 S., R.11 W.	-	-	7-31-73	*19.6
Do......	.....do.....	NW¼SW¼ sec.31, T.14 S., R.11 W.	-	-	6-15-73 7-18-73 8-15-73	*58.5 *35.2 *26.1
Part 14		CAPE CREEK BASIN				
Cape Creek	Pacific Ocean	SW¼SW¼ sec.2, T.15 S., R.12 W.	-	-	5-16-73 7-18-73	*1.96 *2.10
Part 14		SIUSLAW RIVER BASIN				
Wolf Creek	Siuslaw River	SW¼SE¼ sec.35, T.18 S., R.8 W.	-	-	7-30-73	*10.6
Siuslaw River	Pacific Ocean	NE¼NE¼ sec.3, T.18 S., R.8 W.	-	-	7-30-73	*15.2

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		SIUSLAW RIVER BASIN--Continued				
Wildcat Creek	Siuslaw River	NE¼SE¼ sec.16, T.18 S., R.8 W.	-	-	7-30-73	*8.00
Lake Creek	.....do.....	NW¼SW¼ sec.20, T.16 S., R.7 W.	-	-	7-30-73	*3.80
North Fork Siuslaw River	.....do.....	NW¼SW¼ sec.34, T.17 S., R.11 W.	-	-	7-31-73	*17.6
Siuslaw River	Pacific Ocean	NW¼NE¼ sec.32, T.17 S., R.9 W.	-	-	7-31-73	*42.0
Part 14		UMPQUA RIVER BASIN				
O'Shea Creek	South Umpqua River	SE¼SE¼ sec.36, T.30 S., R.5 W.	-	-	9- 4-73	*.15
Cow Creek	.....do.....	SW¼SW¼ sec.2, T.32 S., R.3 W.	-	-	9- 8-73	*3.70
Applegate Creek	Cow Creek	SW¼SW¼ sec.2, T.32 S., R.3 W.	-	-	9- 8-73	*1.85
Cow Creek	South Umpqua River	NE¼SW¼ sec.35, T.32 S., R.6 W.	-	-	8- 1-73 8-10-73 8-30-73 9-11-73	*2.67 *1.72 *3.62 *3.40
Section Creek	Cow Creek	SW¼SW¼ sec.5, T.33 S., R.6 W.	-	-	9- 7-73	*.14
McCullough Creek	.....do.....	SW¼NW¼ sec.31, T.32 S., R.6 W.	-	-	9- 7-73	*.59
West Fork Cow Creek	.....do.....	SW¼SW¼ sec.30, T.31 S., R.9 W.	-	-	9- 7-73	*2.16
Cow Creek	South Umpqua River	SE¼SW¼ sec.1, T.32 S., R.8 W.	-	-	9- 7-73	*4.47
Middle Creek	Cow Creek	SE¼SW¼ sec.1, T.32 S., R.8 W.	-	-	9- 7-73	*1.87
Doe Creek	.....do.....	NW¼NW¼ sec.35, T.30 S., R.7 W.	-	-	9- 7-73	*.18
Cow Creek	South Umpqua River	SE¼SW¼ sec.19, T.30 S., R.5 W.	-	-	7-13-73 7-24-73 8-15-73 9- 4-73	*27.3 *25.2 *13.1 *16.7
South Myrtle Creek	Myrtle Creek	SW¼SE¼ sec.27, T.29 S., R.5 W.	-	-	7-23-73 8-28-73	*.95 *2.08
Tenmile Creek	Olalla Creek	SE¼SW¼ sec.24, T.28 S., R.8 W.	-	-	7-24-73	*.77
South Umpqua River	Umpqua River	NW¼NE¼ sec.9, T.27 S., R.6 W.	-	-	7-12-73 7-31-73 8-15-73 8-31-73	*75.7 *39.8 *26.1 *56.0
Thielsen Creek	Lake Creek	NE¼ sec.17, T.27 S., R.6 E.	-	-	8-12-73	*.89
Canton Creek	Steamboat Creek	SW¼ sec.32, T.25½ S., R.1 E.	-	-	8-12-73	*10.4
Rock Creek	North Umpqua River	NE¼NE¼ sec.1, T.26 S., R.3 W.	-	-	8-30-73	*20.1
Pollock Creek	Calapooya Creek	SE¼SE¼ sec.10, T.24 S., R.5 W.	-	-	8-30-73	*.07
Elk Creek	Umpqua River	SW¼NW¼ sec.15, T.22 S., R.6 W.	-	-	7-25-73 7-27-73 7-30-73 8- 3-73 9-14-73	*.29 *.16 *.16 *.57 *.66
Smith River	.....do.....	SW¼SE¼ sec.31, T.20 S., R.9 W.	-	-	9-10-73	*8.86

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		TENMILE CREEK BASIN				
Eel Creek	Tenmile Creek	NE¼NE¼ sec.13, T.23 S., R.13 W.	11.0	1957-72	10- 5-72 11-29-72 1-10-73 2-16-73 3-26-73 5-10-73 6-21-73 8- 3-73 9-14-73	*3.68 13.0 40.9 24.4 49.6 14.0 7.02 *3.65 *3.03
Part 14		NORTH SLOUGH BASIN				
North Slough (known locally as Bear Creek)	Pacific Ocean	SW¼NE¼ sec.7, T.24 S., R.12 W.	2.42	1958-72	5- 7-73 9-10-73	*2.00 *.41
Left branch of North Fork Slough (known locally as North Slough)	North Fork of North Slough	NW¼ sec.1, T.24 S., R.13 W.	1.71	1957-67, 1969-72	5- 9-73 9-10-73	*2.95 *.29
Part 14		COOS RIVER BASIN				
Tioga Creek	South Fork Coos River	SW¼SW¼ sec.17, T.26 S., R.9 W.	-	-	7-16-73 8-16-73	*4.46 *2.15
West Fork Millicoma River	Millicoma River	NE¼NE¼ sec.9, T.24 S., R.11 W., below Stall Falls	-	1972	5-10-73 9-17-73	*34.3 *3.13
Part 14		COQUILLE RIVER BASIN				
Middle Fork Coquille River	South Fork Coquille River	NW¼NE¼ sec.6, T.29 S., R.8 W.	-	-	7- 6-73 7-24-73	*.23 *.10
Lake Creek	Middle Fork Coquille River	SW¼SE¼ sec.31, T.28 S., R.8 W.	-	-	7-24-73	*.04
Middle Fork Coquille River	South Fork Coquille River	SE¼SE¼ sec.9, T.30 S., R.9 W.	-	-	8-27-73	*1.61
Do......	.....do.....	NW¼SE¼ sec.33, T.29 S., R.9 W.	-	-	8-27-73	*6.31
Do......	.....do.....	NW¼SE¼ sec.26, T.29 S., R.12 W.	-	-	8-27-73	*12.9
North Fork Coquille River	South Fork Coquille River	NW¼NW¼ sec.36, T.28 S., R.12 W.	-	-	8- 9-73 8-14-73	*2.56 *5.14
East Fork Coquille River	North Fork Coquille River	NE¼NW¼ sec.36, T.28 S., R.12 W.	-	-	8-14-73	*9.57
North Fork Coquille River	South Fork Coquille River	NW¼ sec.36, T.28 S., R.12 W.	-	-	8-28-73	*19.3
Part 14		TWOMILE CREEK BASIN				
Twomile Creek	Pacific Ocean	NW¼SW¼ sec.20, T.29 S., R.14 W.	-	1926, 1931, 1935-37	7-17-73 8-15-73 9-27-73	*.05 *.04 *.05
Part 14		NEW RIVER BASIN				
Floras Creek	New River	Sec.3, T.31 S., R.14 W.	-	-	9-13-73	*2.21
Do......	.....do.....	NE¼SW¼ sec.2, T.31 S., R.15 W.	-	1926, 1931-37, 1949-51, 1965-67	7-17-73 7-25-73 8-15-73 9-13-73	*6.45 *5.61 *2.45 *8.14

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Part 14		SIXES RIVER BASIN				
Sixes River	Pacific Ocean	NE¼SW¼ sec.9, T.32 S., R.15 W.	-	1931-32, 1934-36, 1938, 1949-52, 1967-70	7-17-73 7-25-73 8-15-73 9-13-73	*26.9 *21.5 *16.8 *14.9
Part 14		ELK RIVER BASIN				
Elk River	.....do.....	NW¼NW¼ sec.21, T.32 S., R.15 W.	86.1	1931-32, 1934-37, 1951-52, 1967-70	7-17-73 8-15-73 9-13-73	*74.8 *53.0 *43.4
Part 14		EUCHRE CREEK BASIN				
Euchre Creek	.....do.....	SW¼NE¼ sec.8, T.35 S., R.14 W.	-	1926, 1931, 1932, 1934-36, 1938, 1949-52	7-17-73 8-15-73	*16.7 *8.97
Part 14		ROGUE RIVER BASIN				
Boundary Springs	Rogue River	NE¼ sec.4, T.29 S., R.5 E.	-	-	9-11-73	33.5
Castle Creek	.....do.....	SE¼ sec.26, T.30 S., R.3 E.	-	-	9-11-73	12.0
Taggarts Creek	Peyton Creek	SW¼ sec.20, T.33 S., R.2 E.	-	-	6-13-73 7-20-73 8-21-73	.01 .01 .01
Do......	.....do.....	SE¼ sec.20, T.33 S., R.2 E.	-	-	6-13-73 7-20-73 8-21-73	1.47 1.23 1.11
Peyton Creek	Rogue River	N½ sec.20, T.33 S., R.2 E.	-	-	6-13-73 8-21-73	2.45 1.48
Diamond Creek	.....do.....	SE¼ sec.19, T.33 S., R.2 E.	(b)	-	6-13-73 7-20-73 8-21-73	3.63 4.00 4.09
Floras Creek (site No. 1)	.....do.....	NE¼ sec.30, T.33 S., R.2 E.	-	-	6-13-73 7-20-73 8-21-73	.05 .03 .02
Floras Creek (site No. 2)	.....do.....	NE¼ sec.30, T.33 S., R.2 E.	-	-	6-13-73 7-20-73 8-21-73	1.07 1.01 .94
Lost Creek	.....do.....	NW¼ sec.30, T.33 S., R.2 E.	-	-	6-13-73 7-20-73 8-21-73	1.95 1.47 1.06
Flat Creek	Elk Creek	SE¼ sec.28, T.32 S., R.1 E.	-	-	6- 6-73 7-18-73 8-31-73	1.05 .15 .14
Slate Creek	Applegate River	NE¼SW¼ sec.31, T.36 S., R.6 W.	-	-	8-22-73	*.62
Sterling Creek	Little Applegate River	NE¼SW¼ sec.18, T.39 S., R.2 W.	-	-	7- 3-73	*0
Louse Creek	Jumpoff Joe Creek	NE¼SE¼ sec.26, T.35 S., R.6 W.	-	-	8-22-73	*.04

See footnotes at end of table.

Discharge measurements at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		HUNTER CREEK BASIN				
Part 14						
Hunter Creek	Pacific Ocean	SW¼SW¼ sec.7, T.37 S., R.14 W.	-	1931, 1934, 1936	7-18-73 8-15-73	*7.71 *3.09
		PISTOL RIVER BASIN				
Part 14						
Pistol River	.....do.....	SE¼SE¼ sec.20, T.38 S., R.14 W.	-	1932, 1935, 1949-50	7-18-73 8-15-73	*22.1 *11.2
		WINCHUCK RIVER BASIN				
Part 14						
Winchuck River	.....do.....	SE¼SE¼ sec.24, T.41 S., R.13 W.	-	1931, 1932, 1934-36, 1949-52	7-19-73 8-15-73	*23.8 *16.0

* Base flow.
‡ Operated as a continuous-record gaging station.
b Springfed.
c Base flow from intervening springs can be obtained by subtracting flow of Deschutes River below Crane Prairie Reservoir. (See station 14054000.)

Warm Springs River seepage investigations - headwater to mouth

A series of discharge measurements were made during the 1973 water year, from May 31 to June 6, on the Warm Springs River, tributaries, and diversions, to study channel gains and losses. Because Mill Creek contributes approximately 40 percent of the total flow at its confluence with the Warm Springs River, discharge measurements have also been made along its length, and it has been treated as a subreach. Measurements were made during periods of constant base flows of the streams. Flows near the mouth at the gaging station at Kahneetah Hot Springs showed less than a 2 percent difference in discharge for any 2 days, from June 4-6, when the bulk of the measurements were made, and only a 3.5 percent difference for the entire measuring period. No measurable precipitation had fallen on any of the drainage area for 5 days prior to the investigation. Tributary flow was considered a contribution and not a gain; diversion was considered a deduction and not a loss. Indicated gains or losses may be substantially in error because of small inaccuracies in open-channel measurements. Water temperatures have been included in this tabulation because they are helpful in locating major springs. No previous seepage investigation has been made in this reach.

WARM SPRINGS RIVER

Date	Stream or diversion	Location	River mile	Discharge, in cubic feet per second				Water temp. °C
				Main stem	Tributary diversion	Gain or loss in section	Total gain or loss	
	Warm Springs River	Headwater.	51.4					
	... do ...	McQuinn line (Reservation boundary).	45.4					
5-31-73	Dry Creek	Near McQuinn line in sec.36, T.6 S., R.8 E.	45.2		+0.25			-
Do...	Warm Springs River	.... do	44.8	2.03			+2.03	8.5
Do...	... do ...	At old reservation boundary in sec.6 T.7 S., R.9 E.	43.4	2.24		+.21	+2.24	7.0
6- 4-73	... do ...	.... do	43.4	2.29			+2.29	8.5
Do...	R.B. tributary	In sec.4, T.7 S., R.9 E.	41.5		+1.40		+3.64	10.0
Do...	Warm Springs River	10 ft below confluence with tributary in sec.4, T.7 S., R.9 E.	41.5	5.34		+1.70	+5.34	13.0
Do...	R.B. tributary	0.1 mi upstream from upper bridge in sec.3, T.7 S., R.9 E.	40.5		+1.50		+65.2	-
Do...	Warm Springs River	At upper bridge on road W240 in sec.3 T.7 S., R.9 E.	40.4	66.7		+59.9	+66.7	7.5
Do...	Bunchgrass Creek	Near Warm Springs Meadows in sec.2, T.7 S., R.9 E.	39.7		+2.02		+74.8	11.0
Do...	Warm Springs River	30 ft, below confluence with Bunchgrass Creek in sec.2, T.7 S., R.9 E.	39.7	76.8		+8.10	+76.8	10.5
Do...	Big Springs	Near Schoolie Bridge in sec.7, T.7 S., R.10 E.	36.3		+1.12		+127	9.5
Do...	Warm Springs River	At Schoolie Bridge in sec.7, T.7 S., R.10 E.	36.3	128		+50.1	+128	13.5
Do...	S.F. Warm Springs River	Near Schoolie Pasture at road B200 crossing in sec.18, T.7 S., R.10 E.	36.1		+1.84		+130	14.5
6- 5-73	Warm Springs River	At old gage site (14-0955.00) at Hehe Mill, in sec.18, T.7 S., R.11 E.	29.3	129		-1.0	+129	14.0
Do...	Badger Creek	At Highway 26 crossing approx. 1.5 mi from mouth, in sec.20, T.7 S., R.11 E.	26.4		+14.8		+144	11.1
Do...	Mill Creek Canal	At Highway 26 crossing approx. 2.5 mi from mouth in sec.25, T.8 S., R.11 E.	21.0		+2.29		+146	13.5
6- 6-73	Mill Creek	At Highway 26 crossing approx. 2.9 mi from mouth in sec.21, T.8 S., R.11 E.	20.3		+86.2		+232	12.6
6- 5-73	Warm Springs River	300 ft above confluence with Beaver Creek in sec.18, T.8 S., R.12 E.	18.3	244		+12.0	+244	14.5
Do...	Beaver Creek	At mouth in sec.18, T.8 S., R.12 E.	18.3		+45.4		+289	17.0
6- 6-73	Warm Springs River	Near Tohet Springs in sec.35, T.8 S., R.12 E.	14.4	272		-17.0	+272	18.0
6- 4-73	Warm Springs River	At fish hatchery in sec.24, T.8 S., R.12 E.	10.3	261		-11.0	+261	-
Do...	... do ...	At gage site (14-0971.00) nr Kahneeta Hot Springs in sec.23, T.8 S., R.13 E.	4.5	278		+17.0	+278	-

MILL CREEK

Date	Stream or diversion	Location	River mile	Main stem	Tributary diversion	Gain or loss in section	Total gain or loss	Water temp. °C
	Mill Creek	Headwater.	24.0					
6- 6-73	... do ...	Outflow of Island Lake near Trout Lake	22.0	15.2		+15.2	+15.2	15.5
Do...	... do ...	Outflow of Trout Lake, in sec.12, T.9 S., R.8 E.	21.4	12.1		-3.10	+12.1	16.5
Do...	N.F. Mill Creek	Outflow of Blue Lake, 3.0 mi from mouth, in sec.25, T.8 S., R.8 E.	17.9		+.026		+12.1	14.0
Do...	Mill Creek	At road B244 crossing in sec.27, T.8 S., R.9 E.	15.8	48.9		+36.8	+48.9	10.0
Do...	... do ...	30 ft above diversion structure, in sec.17, T.8 S., R.10 E.	10.0	46.6		-2.30	+46.6	12.5
Do...	Mill Creek lateral	30 ft below diversion structure, in sec.17, T.8 S., R.10 E.	10.9		-7.68		+38.9	12.5
6- 5-73	Mill Creek	At road crossing below Potters Pond, in sec.19, T.8 S., R.11 E.	6.2	48.7		+9.80	+48.7	11.0
Do...	Boulder Creek	At B100 road crossing, 1.6 mi upstream from mouth, in sec.31, T.8 S., R.11 E.	4.6		dry		+48.7	-
Do...	Mill Creek	At Highway 26 crossing, in sec.21, T.8 S., R.11 E.	2.9	86.2		+37.5	+86.2	12.0

INDEX

Page

- Abert Lake near Valley Falls 20
- "A" Canal at Klamath Falls 43
- Accuracy of data 8
- Acre-foot, definition of 2
- Ahalt Creek near Mitchell 382
- Alder Brook near Rose Lodge 385
- Allen Canal at Echo 106
- Alsea River, near Tidewater 304
  - North Fork, at Alsea 302
- Alsea River basin, discharge measurements at miscellaneous sites in 399
- Amazon Creek at Eugene 227
- Ana River near Summer Lake 22
- Antelope Creek tributary near McDermitt, Nev 377
- Applegate River, near Applegate 365
  - near Copper 364
- Arnold Canal near Bend 138
- Asbury Creek near Cannon Beach 384

- Baldy Creek basin, discharge measurements at miscellaneous sites in 396
- Bateman Creek near Glenwood 383
- Bear Creek (Deschutes River basin) tributary near Brothers 382
- Bear Creek (Deschutes River basin) tributary
  - near Millican 382
  - tributary No. 2 near Brothers 382
- Bear Creek (Grande Ronde River basin) near Wallowa 86
- Bear Creek (Lower Columbia River basin) near Svensen 293
- Bear Creek (Rogue River basin) at Medford 361
- Bear Creek (Willamette River basin) near Cheshire 383
- Beaver Creek (Deschutes River basin) near Paulina 143
- Beaver Creek (Umpqua River basin) near Drew 386
- Beaver Creek basin, discharge measurements at miscellaneous sites in 398
- Beech Creek near Fox 380
- Beulah Reservoir at Beulah 58
- Big Butte Creek, near McLeod 352
  - South Fork, near Butte Falls 351
- Big Creek near Roosevelt Beach 308
- Big Creek basin, discharge measurements at miscellaneous sites in 398,399
- Big Service Creek near Service Creek 381
- Birch Creek at Rieth 103
- Blazed Alder Creek near Rhododendron 175
- Blue Mountain Creek tributary near McDermitt, Nev 376
- Blue River, at Blue River 218
  - below Tidbits Creek, near Blue River 215
- Blue River Lake near Blue River 217
- Box Elder Creek near Grass Valley 383
- Breitenbush River above Canyon Creek, near Detroit 234
- Bridge Creek (John Day River basin) near Prairie City 380
- Bridge Creek (Silver Lake basin) near Thompson Reservoir 376
- Brown Creek near La Pine 129
- Brownlee Reservoir at Brownlee Dam, Idaho-Oregon State line 73
- Brownsworth Creek near Bly 377
- Bruin Creek near Dale 380
- Buck Creek tributary near Scottsburg 386
- Buford Creek near Flora 379
- Bull Run Reservoir Number One near Bull Run 178
- Bull Run Reservoir Number Two near Bull Run 180
- Bull Run River, near Bull Run 181
  - near Multnomah Falls 176
  - North Fork, near Multnomah Falls 177
- Bully Creek at Warmsprings, near Vale 61
- Bully Creek Reservoir near Vale 62
- Burnt River, at Huntington 69
  - near Birdgeport 68
  - near Hereford 67
  - North Fork, near Whitney 64
  - South Fork, above Barney Creek, near Unity 65
  - tributary at Durkee 378
- Butler Creek near Ashland 387
- Butte Creek at Monitor 267
- Butter Creek, near Pine City 105
  - tributary near Pine City 379

- Cabin Creek tributary near Oakland 386
- Calapooia River, at Albany 231
  - at Holley 230
- Calapooya Creek near Oakland 336
- Camas Creek (John Day River basin) near Ukiah 114
- Camas Creek (Warner Lakes basin) near Lakeview 16
- Camp Creek, Middle Fork. near Paulina 382
- Canyon Creek (John Day River basin) East Fork, near Canyon City 380
- Canyon Creek (Malheur River basin) tributary near 378
  Brogan 378
- Cape Creek basin, discharge measurements at miscellaneous sites in 396,399
- Carrol Creek near Mitchell 381
- Cason Creek at Suggs 380
- Catherine Creek near Union 79
- Cedar Creek near Brightwood 179
- Cemetery Creek near Paulina 382
- Central Oregon Canal above Pilot Butte Canal, near Bend 138
- Cfs-day, definition of 2
- Charlton Creek above Crane Prairie Reservoir, near La Pine 126
- Chetco River near Brookings 373
- Chewaucan River near Paisley 21
- Chickahominy Creek near Walton 375,385
- Clackamas River, above Three Lynx Creek 282
  - at Estacada 283
  - near Clackamas 284
- Clear Creek, below Clear Lake, near Government Camp 157
  - near Pine Grove 159
- Clear Creek ditch near Government Camp 158
- Clear Lake near Government Camp 156
- Clearwater River above Trap Creek, near Toketee Falls 329
- Coal Creek basin, discharge measurements at miscellaneous sites in 397
- Cold Springs Canyon, North Fork, tributary at Holdman 379
- Collawash River, tributary near Breitenbush Hot Springs 384
- Collection and computation of data 4
- Collins Creek basin, discharge measurements at miscellaneous sites in 399
- Columbia River, at Columbia City 287,288
  - at Longview 374
  - at McNary Dam, near Umatilla 94
  - at mouth, near Astoria 374
  - at Multnomah Falls 169,170
  - at Rainier 289,290
  - at St. Helens 374
  - at The Dalles 162
  - at Vancouver, Wash 374
  - at Warrendale 167,168
  - at Washougal, Wash 171,172
  - at Wauna 291,292
  - below Priest Rapids Dam, Wash 49
- Condon Creek near Minerva 375,386
- Contents, definition of 2
- Control, definition of 2
- Cooperation 2
- Coos River basin, discharge measurements at miscellaneous sites in 401
- Coquille River, North Fork, near Fairview 345
  - South Fork, at Powers 344
    - near Illahe 343
- Coquille River basin, discharge measurements at miscellaneous sites in 401
- Cottage Grove Lake near Cottage Grove 200
- Cottonwood Creek (Goose Lake basin) near Lakeview 37
- Cottonwood Creek (John Day River basin) near Galena 380
  - East Fork, near Hamilton 381
- Cottonwood Reservoir near Lakeview 37
- Cougar Lake near Rainbow 213
- Cow Canyon Creek near Antelope 382
- Cow Creek, near Azalea 315
  - near Riddle 317
  - West Fork, near Glendale 316
- Coyote Creek near Crow 224
- Crane Creek near Lakeview 376
- Crane Prairie Reservoir near La Pine 127
- Crater Lake near Crater Lake 38
- Crescent Creek at Crescent Lake, near Crescent 135
- Crescent Lake near Crescent 134
- Crooked Creek near Burns Junction 377
  - tributary at Burns Junction 377
- Crooked River, below Opal Springs, near Culver 148
  - near Post 144
  - near Prineville 146
  - near Terrebonne 147
  - tributary near Post 382
- Crowsfoot Creek near Burns 376
- Crystal Creek near Chiloquin 377
- Cubic feet per second per square mile, definition of 2
- Cubic foot per second, definition of 2
- Cultus Creek above Crane Prairie Reservoir, near La Pine 122,123

Page
Cultus River above Cultus Creek, near La Pine............ 121
Currier Creek near Paisley............................... 377

"D" River basin, discharge measurements at
      miscellaneous sites in............................. 396
Dagget Creek near Allegany............................... 386
Dago Gulch near Rockville................................ 377
Dairy Creek near Verboort................................ 274
Deadwood Creek near Deadwood............................. 375,385
Deep Creek above Adel.................................... 18
Deer Creek (Alsea River basin) near Salado............... 307
Deer Creek (Deschutes River basin) above Crane
      Prairie Reservoir, near La Pine.................... 124
Deer Creek (Imnaha River basin) near Imnaha.............. 378
Deer Creek (Umpqua River basin) near Roseburg............ 323
Deer Creek basin, discharge measurements at
      miscellaneous sites in............................. 399
Definition of terms and abbreviations.................... 2
Deschutes County Municipal Improvement District Canal
      at Bend.. 138
Deschutes River, at Benham Falls, near Bend.............. 137
Deschutes River, at Moody, near Biggs.................... 161
  below Bend... 139
  below Crane Prairie Reservoir, near La Pine............ 128
  below Snow Creek, near La Pine......................... 120
  below Wickiup Reservoir, near La Pine.................. 132
  diversions from, near Bend............................. 138
  near Culve[illegible] 142
  near Madras.. 152
Deschutes River basin, discharge measurements at
      miscellaneous sites in............................. 390-393
Detroit Lake near Detroit................................ 235
Devine Canyon near Burns................................. 376
Diamond Lake near Diamond Lake........................... 325
Discharge, definition of................................. 2
Doe Creek near Imnaha.................................... 379
Dog Creek near Idleyld Park.............................. 386
Donnely Creek tributary near Service Creek............... 381
Donner und Blitzen River, near Frenchglen................ 29
  near Voltage... 30,31
Dorena Lake near Cottage Grove........................... 203
Downstream order and station numbers..................... 3
Drainage area, definition of............................. 3
Drake Creek near Adel.................................... 17
Drews Creek near Lakeview................................ 36
Drews Reservoir near Lakeview............................ 36
Drift Creek basin, discharge measurements at
      miscellaneous sites in............................. 397
Dry Creek (Deschutes River basin) near Prineville........ 382
Dry Creek (Grande Ronde River basin) near Bingham Springs 379
Dry Creek (Walla Walla River basin) tributary near
      Milton-Freewater................................... 379
Dry Run Creek near Port Orford........................... 387
Dubois Creek at Estacada................................. 384

Eagle Creek above Skull Creek, near New Bridge........... 72
East Birch Creek near Pilot Rock......................... 102
East lateral near Ashland................................ 360
Eel Creek at Lakeside.................................... 386
Eel Lake near Lakeside................................... 341
Elbow Creek near Bingham Springs......................... 379
Elk Creek (Rogue River basin), near Cascade Gorge........ 354
  near Trail... 355
Elk Creek (South Umpqua River tributary) near Drew....... 314
Elk Creek (Umpqua River basin) near Drain................ 338
Elk River basin, discharge measurements at
      miscellaneous sites in............................. 402
Emigrant Creek near Ashland.............................. 360
Emigrant Lake near Ashland............................... 360
Esmond Creek near Austa.................................. 375,385
Euchre Creek basin, discharge measurements at
      miscellaneous sites in............................. 402
Explanation of surface-water data........................ 4

Fall Creek (Clatskanie River basin) near Clatskanie...... 384
Fall Creek (Willamette River basin), below Winberry
      Creek, near Fall Creek............................. 197
  near Lowell.. 196
Fall Creek Lake near Lowell.............................. 196
Fall River near La Pine.................................. 133
Fern Creek near Lowell................................... 383
Fern Ridge Lake near Elmira.............................. 225
Fields Creek near Mount Vernon........................... 380
Fireline Creek near Butte Falls.......................... 387
Fish Creek, at Big Camas ranger station,
      near Toketee Falls................................. 330
Fishhawk Creek near Jewel................................ 384
Fish Lake near Lakecreek................................. 358
Five Rivers near Fisher.................................. 303
Flynn Creek near Salado.................................. 306

Page
Fogarty Creek basin, discharge measurements at
      miscellaneous sites in............................. 397
Foster Lake at Foster.................................... 243
Fox Creek basin, discharge measurements at
      miscellaneous sites in............................. 399
Furnish Canal near Echo.................................. 106

Gage height, definition of............................... 3
Gales Creek, near Forest Grove........................... 273
Gate Creek at Vida....................................... 220
Gettys Creek near Myrtle Point........................... 387
Glen Aiken Creek tributary near Coquille................. 387
Glen Creek near Salem.................................... 383
Gordon Hollow at DeMoss Springs.......................... 381
Governor Patterson Creek basin, discharge measurements
      at miscellaneous sites in.......................... 399
Grande Ronde River, at Hilgard........................... 77
  at La Grande... 78
  at Rondowa... 88
  at Troy.. 89
  near Elgin... 80
Grande Ronde River basin, discharge measurements at
      miscellaneous sites in............................. 389
Granite Creek near Dale.................................. 381
Grass Valley Canyon near Grass Valley.................... 381
Grave Creek at Pease Bridge, near Placer................. 366
Green Peter Lake near Foster............................. 242

Haskins Creek below reservoir, near McMinnville.......... 261
Haskins Creek Reservoir near McMinnville................. 260
Henderson Creek basin, discharge measurements at
      miscellaneous sites in............................. 398
Hills Creek above Hills Creek Lake, near Oakridge........ 184
Hills Creek Lake near Oakridge........................... 185
Honey Creek near Plush................................... 19
Hood River at Tucker Bridge, near Hood River............. 166
  West Fork, near Dee.................................... 165
Hunter Creek near Gold Beach............................. 387
Hunter Creek basin, discharge measurements at
      miscellaneous sites in............................. 403
Hurricane Creek near Joseph.............................. 84
Hydrologic bench-mark station, definition of............. 3
Hydrologic conditions.................................... 10

Illinois River, East Fork, near Takilma.................. 368
  West Fork, below Rock Creek, near O'Brien.............. 370
  near Kerby... 371
  near Agness.. 372
Immigrant Gulch near Richland............................ 378
Imnaha River at Imnaha................................... 76
Indian Creek (Owyhee River basin) near Jordan Valley..... 377
Indian Creek (Siuslaw River basin) near Rainrock......... 375,385
Introduction... 1
Ives Canyon near Spray................................... 381

Jackass Creek near Dayville.............................. 380
Jackson Creek (Black Rock Desert basin) tributary near
      McDermitt, Nev. 376
Jackson Creek (Umpqua River basin) near Tiller........... 312
Job Creek tributary near Unity........................... 378
John Day River, at McDonald Ferry........................ 119
  at Picture Gorge, near Dayville........................ 113
  at Service Creek....................................... 118
  Middle Fork, at Ritter................................. 116
  near John Day.. 112
  near Prairie City...................................... 380
  North Fork, at Monument................................ 117
  tributary near Clarno.................................. 381
John Day River basin, discharge measurements at
      miscellaneous sites in............................. 390
Johnson Creek at Sycamore................................ 285
Johnson Creek basin, discharge measurements at
      miscellaneous sites in............................. 397
Jones Creek near Grants Pass............................. 387
Jordan Creek (Deschutes River basin) near Tygh Valley.... 383
Juniper Canyon tributary near Mikkalo.................... 381

Kilchis River basin, discharge measurements at
      miscellaneous sites in............................. 395
Kink Creek near Government Camp.......................... 384
Kinney Creek near McKee Bridge........................... 387
Klamath River, at Keno................................... 46
  below Iron Gate Dam, Calif. 48
  below John C. Boyle powerplant near Keno............... 47
  tributary near Keno.................................... 377
Klamath River basin, discharge measurements at
      miscellaneous sites in............................. 388,389
Knowles Creek near Mapleton.............................. 375,385

Page
Ladd Canyon near Hot Lake.......... 379
Lake Billy Chinook near Metolius.......... 151
Lake Creek (Deschutes River basin) near Sisters.......... 149
Lake Creek (Siuslaw River basin), at Triangle Lake.......... 375,385
  near Deadwood.......... 309
Lake Creek (Umpqua River basin) near Diamond Lake.......... 326
Lake Owyhee near Nyssa.......... 52
Lakes and reservoirs:
  Abert Lake near Valley Falls.......... 20
  Beulah Reservoir at Beulah.......... 58
  Billy Chinook, Lake, near Metolius.......... 151
  Blue River Lake near Blue River.......... 217
  Brownlee Reservoir at Brownlee Dam, Idaho-Oregon
      State line.......... 73
  Bull Run Reservoir Number One near Bull Run.......... 178
  Bull Run Reservoir Number Two near Bull Run.......... 180
  Bully Creek Reservoir near Vale.......... 62
  Clear Lake near Government Camp.......... 156
  Cottage Grove Lake near Cottage Grove.......... 200
  Cottonwood Reservoir near Lakeview.......... 37
  Cougar Lake near Rainbow.......... 213
  Crane Prairie Reservoir near La Pine.......... 127
  Crater Lake near Crater Lake.......... 38
  Crescent Lake near Crescent.......... 134
  Detroit Lake near Detroit.......... 235
  Diamond Lake near Diamond Lake.......... 325
  Dorena Lake near Cottage Grove.......... 203
  Drews Reservoir near Lakeview.......... 36
  Eel Lake near Lakeside.......... 341
  Emigrant Lake near Ashland.......... 360
  Fall Creek Lake near Lowell.......... 196
  Fern Ridge Lake near Elmira.......... 225
  Fish Lake near Lakecreek.......... 358
  Foster Lake at Foster.......... 243
  Green Peter Lake near Foster.......... 242
  Haskins Creek Reservoir near McMinnville.......... 260
  Hills Creek Lake near Oakridge.......... 185
  Lemolo Lake near Toketee Falls.......... 327
  Lookout Point Lake near Lowell.......... 192
  McGuire Lake near Fairdale.......... 296
  McKay Reservoir near Pendleton.......... 100
  Owyhee, Lake, near Nyssa.......... 57
  Prineville Reservoir near Prineville.......... 145
  Smith River Reservoir near Belknap Springs.......... 209
  Timothy Lake near Government Camp.......... 279
  Unity Reservoir near Unity.......... 66
  Upper Klamath Lake near Klamath Falls.......... 44
  Waldo Lake near Oakridge.......... 188
  Wallowa Lake near Joseph.......... 82
  Warmsprings Reservoir near Riverside.......... 55
  Wickiup Reservoir near La Pine.......... 131
Lemolo Lake near Toketee Falls.......... 327
Line Creek near Lehman Springs.......... 380
Link River at Klamath Falls.......... 45
Little Butte Creek, North Fork, at Fish Lake,
      near Lakecreek.......... 358
  North Fork, near Lakecreek.......... 359
  South Fork, near Lakecreek.......... 357
Little Creek (Big Creek basin) near Knappa.......... 384
Little Creek (Grande Ronde River basin) at High Valley,
      near Union.......... 379
Little Deschutes River near La Pine.......... 136
Little Juniper Canyon near Pine City.......... 380
Little North Santiam River near Mehama.......... 237
Little River at Peel.......... 334
Little Sandy River near Bull Run.......... 182
Lizard Creek near Hampton.......... 382
Lone Pine Creek tributary near Prineville.......... 382
Long Gulch near Rockville.......... 377
Long Tom River, at Monroe.......... 228
  near Alvadore.......... 226
  near Noti.......... 223
Lookingglass Creek at Brockway.......... 321
Lookout Creek (Deschutes River basin) near Post.......... 382
Lookout Creek (Willamette River basin) near Blue River.......... 216
Lookout Point Lake near Lowell.......... 192
Lost Creek near Rocky Point.......... 377
Lost Creek basin, discharge measurements at
      miscellaneous sites in.......... 398
Lostine River near Lostine.......... 85
Lost Valley Creek tributary near Ironside.......... 378
Lower Columbia River basin, discharge measurements at
      miscellaneous sites in.......... 395
Luckiamute River, near Hoskins.......... 250
  near Suver.......... 251
Lyndon Creek near Waldport.......... 385
Lytle Creek near Vale.......... 378

Page
Mahogany Creek near Homestead.......... 378
Malheur Lake outlet at Narrows.......... 32
Malheur River, at Little Valley, near Hope.......... 60
  below Warmsprings Reservoir, near Riverside.......... 56
  near Drewsey.......... 54
  North Fork, above Beulah Reservoir, near Beulah.......... 57
    at Beulah.......... 59
  tributary near Drewsey.......... 378
  tributary near Harper.......... 378
Malheur River basin, discharge measurements at
      miscellaneous sites in.......... 389
Marys River near Philomath.......... 229
Maxwell Canal near Hermiston.......... 106
McGuire Lake near Fairdale.......... 296
McIntyre Creek near Starkey.......... 378
McKay Creek (Tualatin River basin) near Hillsboro.......... 275
McKay Creek (Umatilla River basin), near Pendleton.......... 101
  near Pilot Rock.......... 99
  North Fork, near Pilot Rock.......... 98
McKay Reservoir near Pendleton.......... 100
McKenzie River, at McKenzie Bridge.......... 211
  at outlet of Clear Lake.......... 207
  below Trail Bridge Dam, near Belknap Springs.......... 210
  near Vida.......... 219
  South Fork, above Cougar Lake, near Rainbow.......... 212
  near Rainbow.......... 214
Merrill Creek at Deer Island.......... 384
Metolius River near Grandview.......... 150
Middle Creek tributary near McKinley.......... 387
Middle Santiam River near Cascadia.......... 240
Milbury Creek near Port Orford.......... 387
Mill Creek (Mill Creek basin) near Yachats.......... 385
Mill Creek (Columbia River basin) South Fork, near
      The Dalles.......... 163
Mill Creek (tributary to South Yamhill River) near
      Willamina.......... 257
Mill Creek (tributary to Willamette River) at Salem.......... 254
Mill Creek (Yaquina River basin) near Toledo.......... 301
Millicoma River, West Fork, near Allegany.......... 342
Minam River at Minam.......... 87
Mission Creek at St. Andrews Mission.......... 379
Mohawk River near Springfield.......... 221
Molalla River, above Pine Creek, near Wilhoit.......... 264
  near Canby.......... 265
Moloch Creek basin, discharge measurements at
      miscellaneous sites in.......... 398
Moores Hollow tributary near Weiser, Idaho.......... 378
Mosby Creek at mouth, near Cottage Grove.......... 205
Mosier Creek near Mosier.......... 164
Mosquito Creek near Shevlin.......... 376
Mult Creek near Tiller.......... 386

Needle Branch near Salado.......... 305
Nehalem River near Foss.......... 294
Nelson Creek at Pendleton.......... 379
Neskowin Creek basin, discharge measurements at
      miscellaneous sites in.......... 396
Nestucca River, near Beaver.......... 298
  near Fairdale.......... 297
New River basin, discharge measurements at
      miscellaneous sites in.......... 401
North Canal near Bend.......... 138
North Coast basin, discharge measurements at
      miscellaneous sites in.......... 395,396
North Drews Canal near Lakeview.......... 36
North Myrtle Creek near Myrtle Creek.......... 318
North Pine Creek near Homestead.......... 378
North Santiam River, at Mehama.......... 238
  at Niagara.......... 236
  below Boulder Creek, near Detroit.......... 233
North Slough basin, discharge measurements at
      miscellaneous sites in.......... 401
North Umpqua River, above Copeland Creek, near
      Toketee Falls.......... 331
  at Winchester.......... 335
  below Lemolo Lake, near Toketee Falls.......... 328
North Unit main canal near Bend.......... 138
North Yamhill River, at Pike.......... 262
  near Fairdale.......... 259

Oak Grove Fork, above powerplant intake.......... 281
  near Government Camp.......... 280
Ochoco Reservoir (Creek) tributary near Prineville.......... 382
Odell Creek near Crescent.......... 130
Olalla Creek near Tenmile.......... 319
Oswego Canal near Lake Oswego.......... 277
Other data available.......... 10
Owyhee River, below Owyhee Dam.......... 53
  near Rome.......... 51

Page
Parrott Creek at Roseburg 386
Partial-record station, definition of 3
Paul Creek near Long Creek 381
Pine Creek near Oxbow 74
Pistol River basin, discharge measurements at miscellaneous sites in 403
Pole Creek tributary near McDermitt, Nev 377
Pole Creek tributary No. 2 near McDermitt, Nev 377
Poop Creek near Big Bottom 384
Powder River, near Richland 71
  near Sumpter 70
Prineville Reservoir near Prineville 145
Publications 9

Quartzville Creek near Cascadia 241
Quinn River near La Pine 125

Ramsey Creek near Dufur 383
Ransom Creek near Brookings 387
Red Blanket Creek near Prospect 349
Rhea Creek near Heppner 109
Rickreall Creek near Dallas 252
Rock Creek (John Day River basin) tributary near Hardman 381
Rock Creek (Umpqua River basin) near Glide 333
Rocky Creek basin, discharge measurements at miscellaneous sites in 397
Rogue River, above Prospect 346
  at Dodge Bridge, near Eagle Point 356
  at Grants Pass 363
  at Raygold, near Central Point 362
  below Prospect 347
  near Agness 367
  near McLeod 353
  South Fork, near Prospect 348
    south of Prospect 350
Rogue River basin, discharge measurements at miscellaneous sites in 402
Row River, above Pitcher Creek, near Dorena 202
  near Cottage Grove 204
Runoff in inches, definition of 3
Rysdam Canyon tributary near Minam 379

Sagebrush Creek tributary near Gateway 382
Sage Hen Creek near Burns 376
Sage Hollow tributary near Millican 382
Sain Creek near Gaston 270
Salmon Creek near Oakridge 187
Salmon River (Sandy River basin) near Government Camp 173
Salmon River basin, discharge measurements at miscellaneous sites in 396
Salt Creek near Lakeview 376
Saltzman Creek at Portland 384
Sam Creek near Minerva 386
Sandy River near Marmot 174
Santiam River at Jefferson 249
Sawyer Creek near Elkton 386
Schoolhouse Creek basin, discharge measurements at miscellaneous sites in 397
Schooner Creek basin, discharge measurements at miscellaneous sites in 396,397
Scoggins Creek above Henry Hagg Lake, near Gaston 269
  near Gaston 271
Selected references 11
Sheek Creek near Cascadia 383
Shellrock Creek, East Fork, near Government Camp 384
Shitike Creek at Warm Springs 153
Short Creek at Breitenbush Hot Springs 383
Silent Creek near Diamond Lake 324
Siletz River at Siletz 299
Siletz River basin, discharge measurements at miscellaneous sites in 397
Silver Creek (Malheur and Harney Lakes basin) near Riley 34
Silver Creek (Pudding River basin) at Silverton 266
Silver Creek (Silver Lake basin) near Silver Lake 23
Silvies River, East Fork, near Lawen 25,26
  near Burns 24
  near Seneca 376
  West Fork near Lawen 27,28
Siuslaw River at Alma 375,385
  near Lorane 375,385
  near Mapleton 310
  tributary near Rainrock 385
  North Fork, near Minerva 311
Siuslaw River basin, discharge measurements at miscellaneous sites in 399,400
Sixes River basin, discharge measurements at miscellaneous sites in 402

Page
Smith River (Umpqua River basin) near Gardiner 339
  tributary near Gardiner 386
Smith River (Willamette River basin) above Smith River Reservoir, near Belknap Springs 208
Smith River Reservoir near Belknap Springs 209
Snake River at Hells Canyon Dam, Idaho-Oregon State line 75
  below Ice Harbor Dam, Wash 90
  near Murphy, Idaho 50
  at Weiser, Idaho 63
Snake River basin, discharge measurements at miscellaneous sites in 389
Snailback Creek near Selma 387
Snipe Creek near Ukiah 115
Soap Creek tributary near Suver 383
South Depoe Bay Creek basin, discharge measurements at miscellaneous sites in 397
South Santiam River, at Foster 244
  at Waterloo 247
  below Cascadia 239
  near Foster 246
South Umpqua River, at Tiller 313
  near Brockway 322
South Yamhill River, near Whiteson 258
  near Willamina 255
  tributary near Willamina 383
Spanish Hollow at Wasco 381
  tributary at Wasco 381
Special networks and programs 3
Spencer Creek basin, discharge measurements at miscellaneous sites in 397
Sprague River, near Beatty 40
  near Chiloquin 41
Spring Creek tributary near Rockville 377
Squaw Creek (Deschutes River basin) near Sisters 141
Squaw Creek (Little Nestucca River basin) near Neskowin 385
Stage-discharge relation, definition of 3
Steamboat Creek near Glide 332
Strawberry Creek above Slide Creek, near Prairie City 111
Sucker Creek, below Little Grayback Creek, near Holland 369
Sunrise Valley tributary near Follyfarm 376
Swalley Canal near Bend 138
Swamp Creek near McCredie Springs 383
Sweet Creek near Beck 375,386

Tenmile Creek (Tenmile Creek basin) near Lakeside 340
Tenmile Creek basin, discharge measurements at miscellaneous sites in 401
Tenmile Creek (Umpqua River basin) at Tenmile 320
Thiel Creek basin, discharge measurements at miscellaneous sites in 398
Thielsen Creek near Diamond Lake 386
Thomas Creek near Scio 248
Threemile Creek near Crystal 377
Timothy Lake near Government Camp 279
Trask River basin, discharge measurements at miscellaneous sites in 395
Trout Creek (Alvord Lake basin) near Denio, Nev 35
Trout Creek (Grande Ronde River basin) near Enterprise 379
  tributary near Chico 379
Tualatin River, at Farmington 276
  at Gaston 268
  at West Linn 278
  near Dilley 272
Tumalo Creek near Bend 140
Tumble Creek near Westfir 383
Turner Creek near McDermitt, Nev 376
Twentymile Creek near Adel 15
Twisty Creek near Belknap Springs 383
Twomile Creek basin, discharge measurements at miscellaneous sites in 401

Umatilla project feed canal near Echo 106
Umatilla River, above Meacham Creek, near Gibbon 95
  at Pendleton 97
  at Yoakum 104
  near Cayuse 96
  near Umatilla 107
  principal diversions from, between Yoakum and Umatilla gaging stations 106
Umatilla River basin, discharge measurements at miscellaneous sites in 389
Umpqua River near Elkton 337
Umpqua River basin, discharge measurements at miscellaneous sites in 400
Unity Reservoir near Unity 66
Upper Klamath Lake near Klamath Falls 44

INDEX

Page

Vance Creek near Canyon City.............................. 380
Venator Creek near Silvies................................ 380
Vincie Creek basin, discharge measurements at
        miscellaneous sites in............................ 399

Wade Creek basin, discharge measurements at
        miscellaneous sites in............................ 398
Waldo Lake near Oakridge.................................. 188
Waldo Lake outlet near Oakridge........................... 189
Walla Walla River, North Fork near Milton-Freewater...... 92
  South Fork, near Milton................................. 91
  Springs in.. 93
Wallowa Lake near Joseph.................................. 82
Wallowa River, at Joseph.................................. 83
  East Fork, near Joseph.................................. 81
Warmsprings Reservoir near Riverside...................... 55
Warm Springs River near Kahneeta Hot Springs.............. 154
Warm Springs River basin, seepage investigations in...... 404
Waterspout Creek near Baker............................... 378
West Diversion main canal near Umatilla................... 106
West Fork Dry Creek near Gooseberry....................... 381
Western Land Canal near Echo.............................. 106
Whisky Creek (John Day River basin) near Mitchell........ 380
Whisky Creek (Willamette River basin) near Estacada...... 384
White Creek near Peel..................................... 386
Whitehorse Valley basin, discharge measurements at
        miscellaneous sites in............................ 388
White River, below Tygh Valley............................ 160
  near Government Camp.................................... 155
Wickiup Reservoir near La Pine............................ 131
Wildcat Creek (Deschutes River basin) near Prineville.... 382
Wildcat Creek (Siuslaw River basin) near Austa........... 375,385
Wiley Creek near Foster................................... 245
Willamette River, at Albany............................... 232
  at Harrisburg... 222
  at Portland... 286
  at Salem.. 253
  at Wilsonville.. 263

Page

Coast Fork, at London..................................... 199
  below Cottage Grove Dam................................. 201
  near Goshen... 206
Middle Fork, above Salt Creek, near Oakridge.............. 186
  at Jasper... 198
  below North Fork, near Oakridge......................... 191
  near Dexter... 193
  near Oakridge... 183
  North Fork of, near Oakridge............................ 190
  tributary near Oakridge................................. 383
Willamette River basin, discharge measurements at
        miscellaneous sites in............................ 393-395
Willamina Creek near Willamina............................ 256
Williamson River, below Sprague River, near Chiloquin.... 42
  near Klamath Agency..................................... 39
Willow Creek (Deschutes River basin) tributary near
        Culver.. 382
Willow Creek (Willow Creek basin), at Heppner............. 108
  near Arlington.. 110
  tributary near Heppner.................................. 380
Wilson River near Tillamook............................... 295
Winberry Creek near Lowell................................ 195
Winchuck River basin, discharge measurements at
        miscellaneous sites in............................ 403
Wind Creek near Detroit................................... 383
Windy Creek near Holland.................................. 387
Wolf Creek (Deschutes River basin) tributary near
        Paulina... 381
Wolf Creek (Siuslaw River basin) near Austa............... 375,385
Woods Hollow at Ashwood................................... 382

Yachats River basin, discharge measurements at
        miscellaneous sites in............................ 399
Yaquina River near Chitwood............................... 300
Yaquina River basin, discharge measurements at
        miscellaneous sites in............................ 398

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